

INSIDE DOPE

Learn to live and laugh—
Thus delay your epitaph

By **GEORGE F. TAUBENECK**

Stories of the Week
Gags of the Week
Verse of the Week
Quotes of the Week
Hammock Philosophy

Stories of the Week

Detroit's augustly exclusive Economic Club heard Postmaster General Arthur Summerfield. His remarks evoked polite applause.

"Do you have as much fun," heckled a long-time friend later, "being Postmaster as you did while playing Post Office when you were younger?"

Summerfield replied superbly:

"As a lad I tried to get all the juice out of an apple. And I still believe in doing that."

For "kicks" a widower attended a Spiritualist seance.

Madame Lazonga produced a ghost-like image.

"Here is your dear departed wife," Madame resonated. "Speak to her."

Long silence.

"I say, speak to her."

"If that's my wife, she'll do the talking."

End of seance.

An exam question: "Describe the Alamo."

One answer: "Apple pie with ice cream."

A European tourist had seen our skyscrapers, inspected our factories, and witnessed Niagara Falls, the Grand Canyon, etc.

What impressed him most?

"The size of the American garbage can!"

Gags of the Week

Many women go from a church saying "I do" to (in the home) "You do what I tell you."

Girls no longer marry men to reform them; they want to get in on some of the fun themselves.—*Wall Street Journal*.

"Every person in this room," foot-in-mouthed the toastmaster, "is either a friend of yours . . . or has heard you speak."

Verse of the Week

The world is a spiritual kindergarten

Where everybody is trying to spell God

With the wrong blocks.—**EDWARD ARLINGTON ROBINSON.**

I am your friend, and my love for you goes deep.

There is nothing I can give you which you have not got;

But there is much, very much, that, while I cannot give it, You can take.

No heaven can come to us unless our hearts

Find rest in today. Take Heaven!

No peace lies in the future which is not hidden

In this present little instant. Take Peace!

Life is so generous a giver, but we, Judging its gifts by their covering,


Cast them away as ugly, or heavy, or hard.

Remove the covering, and you will find beneath it

A living splendor, woven of love, by wisdom, with power.

Life is so full of meaning and purpose,

(Concluded on Page 6, Col.3)



AIR CONDITIONING & REFRIGERATION News

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Home Cooling Given Prominent Place on IAEI Meeting Program

NEW YORK CITY—Preliminary program for its 19th annual conference has been announced by the International Association of Electrical Leagues.

The conference will be held Sept. 29 to Oct. 2 at the Bellevue-Stratford hotel, Philadelphia. It will consist of general sessions and social activities the first three days and a business meeting the last day.

Among those scheduled to speak at general sessions are John M. Otter, executive vice president of Philco Corp.; George S. Jones, Jr., managing director of the Air-Conditioning & Refrigeration Institute; A. E. Bush, assistant controller of Detroit Edison Co.; and W. G. Peirce, president of Peirce-Phelps, Inc., Philadelphia.

Otter will talk at the opening session Wednesday morning, Sept. 29, on a subject to be announced. Jones and Bush are to speak Wednesday afternoon, the former on "Room Cooler Installations—Residential and Commercial" and (Concluded on Back Page, Col. 1)

A. O. Smith Set To Expand In Air Conditioning

KANKAKEE, Ill.—As a first step in a greatly-accelerated expansion of its heating and air conditioning program, the Permaglas Div. of A. O. Smith Corp. has appointed Kendall H. Flint as chief engineer in charge of heating.

Flint will spearhead the development and production of a broad new line of Permaglas heating and air conditioning units, augmenting the Permaglas glass-lined water heater.

A graduate of Amherst college with a Master of Science degree from Massachusetts Institute of Technology, Flint has spent his entire career in heating and air conditioning.

Before taking his position with the Permaglas Div. at Kankakee, Flint spent 19 years with the American Gas Association laboratories and nine years with the Ingersoll Products Div. of Borg-Warner Corp.

At AGA, Flint's last position was as chief engineer of testing and inspection. Prior to this, he (Concluded on Back Page, Col. 3)

Report Dishwasher-Disposer Unit Being Tested by G-E

LOUISVILLE, Ky.—The General Electric Co. is reportedly testing a new combination dishwasher and garbage disposal unit that is said to be the first of its kind ever designed.

With the new unit, it is claimed, the housewife could put her dirty dishes right from the table into the dishwasher without scraping them first. The garbage disposer would work along with the dishwasher. The disposer could also operate independently of the dishwasher, it was said.

The report indicated that a pilot assembly line would be set up about Oct. 15. It said that the new unit would not appear among the 1955 models.

Philco Adopts Firm Price Policy on Its Room Cooler Models

PHILADELPHIA, Aug. 26—Philco Corp. announced today that it was acting to "stem the runaway price war in room air conditioners" by informing its distributors that all Philco room air conditioner models would be billed at Jan. 4, 1954 prices on and after Monday, Aug. 30.

The firm price action was taken after a review of Philco's plan for next year and present factory and field inventory in room air conditioners, declared Raymond A. Rich, vice president and general manager of Philco's appliance division.

"While the inventory situation is slightly above normal, our field reports indicate that it is much better than the competition," Rich declared.

"Philco's air conditioner inventory situation is sound in view of a slow selling season," Rich continued. "A review of this situation showed that Philco has no real basis for entering the present price race by footbalting its own room air conditioner line."

"Another major factor in the decision to hold our price line was (Concluded on Page 4, Col. 5)

Room Cooler Sales Show 36% Gain In Houston Area for First 6 Mos.

HOUSTON, Texas—A 36% gain in room air conditioner sales during the first six months of this year as compared with the same period last year was the biggest bright spot in appliance distributor sales for the Houston area, the Houston Lighting and Power Co. reported recently.

Some 79 distributors, jobbers, and other factory agencies serving Harris, Galveston, and Fort Bend counties reported sales of 27,713 room air conditioners during the first half of the year as compared with 20,237 in the same period of 1953.

"Air conditioning is definitely (Concluded on Back Page, Col. 5)

Retail Clerks Union Asks Enforcement of Sunday Closing Law

TOLEDO—At the behest of the AFL Retail Clerks Union, the city law director has warned six Toledo appliance and furniture stores that they will face prosecution unless they heed a 19th century Ohio law against "desecration of Sunday."

William F. Sturm, secretary-treasurer of the clerks' district council, complained to Charles T. Lawton, the law director, that the six stores have been violating the law against Sunday work.

The statute provides that "no person who is over 14 years of age shall engage in common labor or open or cause to be opened a building or place for transaction of business or require a person in his employ or under his control to engage in common labor on Sunday."

Lawton said he has notified the six establishments of the complaint brought against them by the union. If the violations of the no-Sunday-work law continue, said the law director, "prosecution will (Concluded on Page 4, Col. 3)

Senate To Investigate Auto Selling Tactics

WASHINGTON, D. C.—An immediate investigation into auto industry merchandising tactics, particularly the transshipment of new cars from new car dealers to used car dealers, was ordered recently by Senator John W. Bricker of Ohio.

The job will fall to the Senate Interstate and Foreign Commerce subcommittee headed by Senator William Purtell, Connecticut Republican. Purtell is expected to report to Congress next January and recommend new legislation.

Reports here indicate that discount selling and fair trade are subjects that will again be brought to the attention of Congress when it reconvenes next year.

Though the House of Representatives this year passed a bill to allow automobile manufacturers to enforce anti-transshipping provisions in their dealer franchises, the Senate failed to act on it.

Add Home Cooling by Just Filling Up a Drawer



A PULL-OUT DRAWER TO HOUSE A REFRIGERATION UNIT at such time that a homeowner wanted to add comfort cooling is an innovation offered by The Lennox Furnace Co. The firm has a furnace-air conditioner combination that fits into a small hall closet (or wherever else there is 7.1 sq. ft. of floor space to spare). The furnace and blower part of the system is installed on top of the drawer compartment. When the homeowner is ready to afford the cooling system, he simply pulls out the drawer and install the cooling unit. If a larger system is needed, the drawer is pulled up, and a larger unit is substituted.

Meeting Set To Hail Advance of Cooling Industry

Program at Columbia U.
Sept. 13-14 To Cover
All Phases of the Field

NEW YORK CITY—"Panorama of Progress" is the theme of a two-day conference on refrigeration and air conditioning to be held at Columbia university here Sept. 13 and 14.

Twenty-four talks by recognized authorities covering virtually all phases of the industry have been scheduled on the tentative program for the conference.

Its purpose is to celebrate the following anniversaries:

10th—The Refrigeration Research Foundation.

20th—American Society of Mechanical Engineers, Process Industries Div.

50th—American Society of Refrigerating Engineers.

60th—American Society of Heating & Ventilating Engineers.

90th—Engineering school of Columbia university.

200th—Columbia university.

First day will be devoted to air conditioning, the morning session being largely confined to research. Design and application practices and problems will be discussed at the afternoon session.

Discussions the second day will cover many phases of refrigeration.

The conference will close Tuesday evening, Sept. 14, with a social hour and dinner followed by two talks.

Chairman of the conference committee is Prof. Carl F. Kayan, executive officer of Columbia's Department of Mechanical Engineering. He has been assisted by H. C. Diehl of TRRF, Leo J. Ricorda of ASME, M. C. Turpin of ASRE, and John Everetts, Jr., of ASHVE.

The sessions will be held at the Pupin Physics Laboratories (120th St. between Broadway and Amsterdam Ave.) on the campus. Tuesday's social hour and dinner are planned for the Men's Faculty club, 400 W. 117th St.

There is no charge for registration, but Prof. Kayan suggests (Concluded on Page 4, Col. 2)

July Major Appliance Sales Rise In Nashville

NASHVILLE, Tenn.—According to official figures compiled by William D. Hall, sales promotion manager of Nashville Electric Service, July sales of major electric appliances through Nashville electric dealers for use on NES lines are up for the first time since March as compared with year-ago levels.

Comparative sales for July and the same month a year ago, respectively, were: refrigerators, 803 and 756; food freezers, 149 and 139; electric ranges, 454 and 396; heaters, 403 and 396.

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Space Was Limited

Philadelphia Drugstore Uses 95-Ton Central System Made Up of 4 Units

PHILADELPHIA—One of the largest drugstore air conditioning systems ever installed is a feature of the newest link in the Sun Ray chain, which opened this spring at Broad St. and Erie Ave. in Philadelphia, it is reported by W. W. Malley, United States Air Conditioning Corp.'s representative in this area.

Four UsAirco pre-assembled tons of cooling capacity are in operation in the huge store, providing four independent zones of cooling, according to the manufacturer's report.

The new Sun Ray outlet, the largest in the chain, runs through the block from Broad St. to Germantown Ave., near Erie Ave., and contains 9,600 sq. ft. of selling area on the main floor, 6,000 additional square feet of basement sales space, and a "Ranch Room" restaurant which will seat 250 persons.

The system of four separate factory-assembled central plants was adopted because space requirements precluded the use of a built-up 95-ton plant which would necessarily be concentrated in a single location.

Two 20-ton, one 25-ton, and one 30-ton UsAirco "Refrigerated

Kooler-aire" units have been installed in two small basement equipment rooms, each unit serving a separate zone. The RK equipment contains in a single compact casing all the elements of a central air conditioning plant, including evaporative condenser, it was pointed out.

The main floor store area is divided into two zones, on the Germantown Ave. side and the Broad St. side, respectively, each cooled by a 20-ton RK. This arrangement permits close control of temperature as the sun shifts from one street frontage to the other. Air is distributed through ductwork around the perimeter to wall grilles.

The 30-ton RK provides conditioned air to the 3,000-sq. ft. Ranch Room, with distribution effected by ceiling diffusers. The basement is cooled by the other 25-ton unit.

Fresh air supply and evaporative condenser exhaust are handled by air shafts from the equipment rooms to the roof. The store was designed and erected under the supervision of A. Pincus, construction supervisor of the Sun Ray Drug Co., according to the manufacturer.

800,000 Non-Cooled Hotel Rooms Provide Lucrative Market

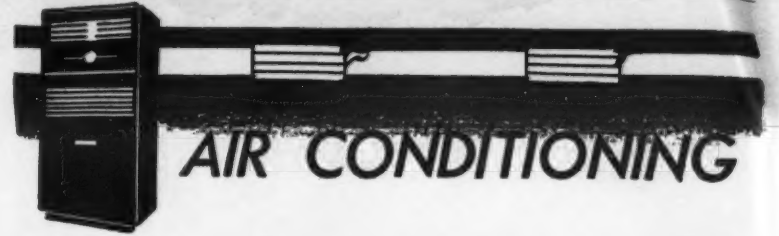
NEW YORK CITY—Less than a quarter of all guest rooms in hotels having 50 or more rooms were air conditioned in 1953, a survey conducted by Ahrens Publishing Co. here has revealed.

After studying the 9,522 hotels listed in the "Travel America Directory," almost all of which have 50 or more guest rooms, the publishing firm concluded that the 800,000 non-air conditioned guest rooms represented a "lucrative" market for the air conditioning industry.

PROFIT MAKERS

Commenting that air conditioning definitely means more profits for hotel operators, Ahrens declared, "Every study ever made showed increased patronage and check averages—payroll costs reduced, and cleaning costs lessened."

"It is the opinion of most operators that customer preferences (a survey conducted by the New Yorker hotel among 17,000 guests revealed that 90% put air conditioning at the top of their service preference list) plus effective competition within the hotel field, and in the highway hotel field, are bringing air conditioning to the



Where Air Conditioned Guest Rooms Are Available

Geographic Area	Hotels With Air Conditioned Guest Rooms	Hotels Without Air Conditioned Guest Rooms	Total Guest Rooms With Air Conditioning	Total Guest Rooms Without Air Conditioning
New England (Me., N.H., Vt., Mass., R.I., Conn.)	11	526	1,926	56,357
Middle Atlantic (N.Y., N.J., Pa.)	104	1,632	37,029	225,626
E. No. Central (Ohio, Ind., Ill., Mich., Wis.)	77	1,456	23,329	192,069
W. No. Central (Minn., Iowa, Mo., N.D., S.D., Neb., Kan.)	154	701	28,041	62,748
South Atlantic (Del., Md., D.C., Va., W. Va., N. C., S.C., Ga., Fla.)	311	826	54,924	72,869
E. So. Central (Ky., Tenn., Ala., Miss.)	127	141	20,624	10,228
W. So. Central (Ark., La., Okla., Texas)	269	267	44,906	18,540
Mountain (Mont., Idaho, Wyo., Colo., N.Mex., Ariz., Utah, Nev.)	103	358	12,399	31,401
Pacific (Wash., Ore., Calif.)	122	1,479	16,547	153,759
Total	1,278	7,386	239,725	823,597

top of the list of accepted necessities for hotel operation.

"Actually it is only a question of several years until this item of equipment will be an essential service all the year among the nation's important hotels."

40% HAD NO AIR CONDITIONING

The publishing firm also sent a questionnaire to 89 hotels of 125 rooms or more in 35 states and found that 40% of them were not air conditioned. The questionnaire disclosed that 23% were completely air conditioned, 31% were partially air conditioned, 5% had public rooms only air conditioned, and 1% rented air conditioning units to guests.

Ahrens noted, "Nearly half of those who use no air conditioning explained that in the climate in which they were located they did not require air conditioning. Most of these were in California! The others were summer and winter resorts."

From the questionnaire, Ahrens learned that 36% of the hotels with air conditioning had window sill or console type air conditioners, 19% had circulating cold water systems, and 45% had a central system with air ducts.

Forty-two per cent of the hotels planned to continue air conditioning guest rooms, while 58% had no further plans at the time.

PREFER YEAR-ROUND SYSTEMS

Asked what they would be willing to invest to cool guest rooms or to provide year-round air conditioning, most operators had no idea what it would cost them and showed a decided preference for year-round systems. Of those who had ideas, \$200 to \$250 per room seemed to be the range for summer cooling only, while \$600 to \$700 for year-round cooling was

mentioned. Some said they would ask for bids.

Tabulating its information gained from the "Travel America Directory" (Spring-Summer, 1953 edition), Ahrens obtained the figures on the market for air conditioning in various regions of the country which are found in the accompanying chart.

A breakdown by individual states indicated that New York (25,724), Texas (25,494), and Florida (24,190) are far in the lead in number of air conditioned guest rooms in hotels with 50 or more rooms. On the other hand, neither Connecticut nor Delaware had a single air conditioned guest room among hotels in this size category.

LOUISIANA LEADS

Percentagewise, Louisiana was far in the lead in air conditioned guest rooms with 96% of total rooms air conditioned. Arizona had 88% of its guest rooms air conditioned, Mississippi 85.3%, and Nevada 84.7%. Texas ranked seventh with 69.4%, while Florida and New York were far behind with 42.7% and 14.2%, respectively.

Thirty-five states had less than half the total guest rooms air conditioned in hotels with 50 or more rooms. For the country over-all, there were 1,063,322 guest rooms in these larger hotels. Out of that number, only 239,725 were air conditioned, leaving 77.5% not air conditioned.



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DISA Plans Changes In Farm Cooling Tank Standards

CHICAGO—The importance of keeping the 3-A Sanitary Standards on Farm Cooling Tanks abreast of the rapid developments in this field was highlighted by a meeting of nearly 25 representatives of 15 different manufacturers of these tanks in Chicago recently.

The representatives met to consider amendments to the 3-A Sanitary Standards for farm cooling tanks which were issued industry-wide in June, 1953.

The importance of the meeting, called by the Task Committee on Farm Holding and/or Cooling Tanks of the Dairy Industries Supply Association Technical Committee, was emphasized by the presence of L. N. Lucas, of The Bastian-Blessing Co., who is DISA's president, and Roberts Everett, DISA's executive vice president.

Also present were George Putnam, The Creamery Package Mfg. Co., and Paul K. Girton, Girton Mfg. Co., chairman and co-chairman, respectively, of the DISA Technical Committee.

Since the 1953 standard for farm and/or cooling tanks was issued, it was pointed out, field experience has indicated that some changes are desirable.

At its recent meeting the DISA Task Committee accordingly prepared tentative drafts of certain possible amendments for consideration at the next session of the over-all 3-A Sanitary Standards Committee, Nov. 10-12 at the Georgian hotel, Evanston, Ill.

Within that body, the changes tentatively put forward will be subjected to minute scrutiny by sanitarians, public health officials, and dairy processors.

Eakes Joins Conditioned Air As Executive Vice President

GREENSBORO, N. C.—Marion L. Eakes, of Greensboro, has been named executive vice president of Conditioned Air, Inc., formerly General Metals Construction Co., Inc.

Conditioned Air will specialize in industrial air conditioning, it was announced by R. Saunders Williams, secretary-treasurer of the firm.

W. Walter Horning is president of Conditioned Air, Inc. He and Williams are executive vice president and president, respectively, of General Metals, Inc.

Pittsburgh Contractors Organize RACCA Unit

CLEVELAND—A large group of refrigeration and air conditioning contractors of Pittsburgh met recently to form a local RACCA and to file their application for affiliation with RACCA National, according to Ray Kromer, executive vice president of the Refrigeration & Air Conditioning Contractors Association.

Previous meetings were held in Pittsburgh at which time the plans and programs of the national association were discussed and approved.

Joseph Marchase, of Marchase Refrigeration, will head up the Pittsburgh RACCA as president. W. F. O'Neill, of McCreery Brothers & Co., was elected vice president, and L. D. Harrison of John Harrison Co. was elected secretary and treasurer.

Members Keist, Fidler, and Koenig were appointed as members of the joint committee for local cooperative programs with the local United Association. O'Neill heads up the committee on constitution and laws and Marchase was elected chairman of the membership committee.

The new Pittsburgh RACCA, Ray Kromer reports, held its first regular meeting the week of Aug. 23 to start work on the plans and programs.

Typhoon Combines Factory, Office at New Brooklyn Site

BROOKLYN—The Typhoon Air Conditioning Co., Inc. is currently moving from its two present plants to new combined factory and office facilities at 505 Carroll St., Brooklyn 15, the company has announced. The move is taking place between Aug. 20 and Sept. 3. New telephone number is Ulster 8-0800.

Fox Heads Buying Co-op Set Up by N. Y. Dealers

NEW YORK CITY—Charles Fox, president of Hempeco Television & Appliance Supermarket, Hempstead, has been named president of Intercounty Corp., an appliance buying co-operative organized recently by five appliance and television firms in Queens and Nassau counties.

Other officers are Clifford Githmark, president of Springfield Home Appliances, Inc., Bellrose, secretary, and Jerome Springer, president, Happy Home Appliances, Inc., West Hempstead, treasurer.

Westbury Appliances, Westbury, and Economart, Jamaica, are other member stores.

Nevins Buys Cunningham; Ong Directs Operations

DETROIT—The Cunningham Products Co. here, manufacturer of display cabinets for frozen foods, dairy products, and ice cream and milk coolers, has been purchased by Nevins Mfg. Co., David G. Ong, who is now operating Cunningham, announced recently.

Ong said Cunningham Products will continue to operate at the same address and will immediately expand production and sales facilities on the entire line.

He noted that the company will operate as a division of Nevins, which is a partnership of three brothers, Francis P., C. L., and R. M. Nevins. Nevins Mfg. Co. also owns and operates the Steelwood Mfg. Co. and the Scripps Motor Co., both in Detroit.

J. G. and R. A. Cunningham, the former partners, are no longer connected with the firm, it was reported.

Ballew Joins Straus-Frank

DALLAS—Appointment of John E. Ballew as sales manager for the air conditioning and television division of Straus-Frank, Dallas distributing firm, was announced.

Ballew was formerly credit sales manager for the Golden State Co. of California and has owned his own retail appliance business in Houston.

UsAirco Appoints Craig To Package Sales Post

MINNEAPOLIS—John E. Craig has been named manager of the packaged refrigeration sales division of the United States Air Conditioning Corp.

Craig was formerly associated with the Carrier Corp., performing special assignment work in the Chicago area. Prior to that he served with the Chrysler Corp. Airtemp Div. as regional manager.

Priester Gets Bid To Cool Mississippi Mental Hospital

JACKSON, Miss.—L. B. Priester Construction Co. of Columbus was apparent low bidder for the state project to renovate the main administration building at East Mississippi Mental hospital, Meridian. The price was \$499,708.

Irby Plumbing & Heating Co. was apparent low on the contract for air conditioning with a bid of \$77,475. Air Comfort Engineering Co. submitted a bid of \$78,275.

All bids will be reviewed by the State Building Commission before contracts are awarded.

Walk-In Blower Coils Do Cooling Job on Apartment

FREDERICKSBURG, Va.—Hooking up two walk-in type blower coils with a 1½-hp. compressor and a Delco furnace for circulation of air has proved to be an efficient crawl space plenum cooling system for an addition to a brick veneer apartment building here, reports Dwight T. Mills, manager of C. H. Montgomery & Co., Inc., who made the installation.

The system is installed in a 32 by 32-ft. addition which has a 22 by 12-ft. connecting section with the old building. The basement of the old building, measuring 24 by 26 ft. less 200 sq. ft. for boiler room, hall, and closets, is used as part of the first floor apartment in the new section, Mills said.

The cooling equipment consists of two Frigidaire CO-400 coils, a Frigidaire model 5150 compressor, and a Delco OPC75HR furnace.

During a recent hot spell, Mills declared, the entire area was cooled comfortably when the official temperature was 103° F. A thermometer in the shade on the entrance portico read 108° F. for two days and 110° F. for several hours during the third day.

Indoors the temperature reached 83° F. at 50% r.h. during the hottest hours in the three-day period, Mills said.

"This seems like very efficient cooling considering the long west wall was unshaded," Mills added.

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Wide Variety of Refrigeration, Air Conditioning In Warehouse

TOLEDO—Refrigeration and air conditioning will be employed to a high degree in the new \$3,000,000 Kroger warehouse and office building now under construction here, according to Carl Fuller, Kroger Toledo branch manager. The project is scheduled for completion in the fall of 1955.

The one-story warehouse will have 166,000 sq. ft. of floor space. Several different types of storage rooms will be built. Included will be below-zero freezers for frozen foods; "wet" and "dry" refrigerated rooms for fresh fruits and vegetables, and special banana ripening rooms.

The modern office with 12,000 sq. ft. of floor space will be air conditioned.

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Columbia Meeting Hails Cooling Advance--

(Concluded from Page 1, Col. 5) early application to insure accommodations at the lecture hall and dinner. Charge for the dinner will be \$6. It is planned to issue "modest" proceedings of the conference, Prof. Kayan also says, for which a prepublication charge of \$4 will be made.

Registrations should be sent to Prof. Kayan, Department of Mechanical Engineering, Columbia University, New York 27, N. Y.

An Industrial Ventilation Conference Sept. 15 to 17 will follow the refrigeration and air conditioning sessions at the same place.

Complete tentative program for the latter event is as follows:

MONDAY, SEPT. 13

9 a.m.—Registration.

9:30 a.m.—Greetings by Prof. Carl F. Kayan.

Columbia Bicentennial Welcome, Dr. John A. Krout, vice president and provost of the university.

"Panorama of Progress In Air Conditioning," chairman: Walter Fleisher, past president, ASHVE.

"Air Conditioning Research In ASHVE, Its Progress and Development," L. N. Hunter, president, ASHVE.

"Past Research," Clark M. Humphreys, senior engineer, ASHVE Research Laboratory.

"Present Research," Richard S. Dill, chairman, ASHVE Committee on Research; National Bureau of Standards.

"Future Research," Elmer R. Kaiser, director of research, ASHVE Research Laboratory.

"Climatological Factors In Air Conditioning," John Everetts, Jr., C. S. Leopold, engineers.

2 p.m.—Chairman: Charles S. Leopold, past president, ASRE.

"Modern Design Practice," Walter A. Grant, Carrier Corp.

"Physiological and Psychological Factors In System Design," Alfred Jaros, Jr., Jaros, Baum & Bolles.

"Factors In the Conditioning of Modern Office Buildings," P. B. Gordon, Wolff & Munier.

"Evolution of Packaged Air Conditioning Units," Justin Neuhoff, General Electric Co.

"Development of the Heat Pump," Eugene R. Ambrose, American Gas & Electric Service Corp.

"Threshold Research In Odor Perception," Dr. Bernice M. Wenzel, Barnard College, Columbia University.

TUESDAY, SEPT. 14

9:30 a.m.—"Panorama of Progress In Refrigeration," chairman: Arthur J. Hess, president, ASRE.

"Developments In Refrigeration Insulation," John F. Stone, Johns-Manville Corp.

"Commercial and Small Industrial Refrigeration Equipment," D. C. McCoy, Frigidaire Div., General Motors Corp.

"Large Capacity Refrigeration Systems," Matthew Lawler, Worthington Corp.

"Refrigerated Transport," John N. Kelly, Fruit Dispatch Co.

"Marine Refrigeration," James Scott, York Corp.

2 p.m.—Chairman: H. C. Diehl, director, TRRF.

"Evolution of Household Refrigerators and Freezers," Milton Kalischer, Westinghouse Corp.

"Refrigeration of Fruits and Vegetables," Wilbur T. Pentzer, U. S. Dept. of Agriculture.

"Design Transitions of the Cold Storage Warehouse," Paul B. Christensen, North East Cold Storage Co.

"Time-Temperature Tolerance of Frozen Foods," Eugene F. Jansen, U. S. Dept. of Agriculture.

"Heat Transfer In Production Food Freezing," William J. Finnegan, W. J. Finnegan Associates.

"Production of Low Temperature: Gay-Lussac and Joule-Thomson," Dr. James H. Potter, Stevens Institute of Technology.

5:30 p.m.—Social hour, Men's Faculty club.

7 p.m.—Conference jubilee dinner, Men's Faculty club. Chairman:

Prof. Carl F. Kayan; toastmaster, Dr. Lyman Bryson, professor emeritus, Columbia U.

Jubilee salutations, Dr. John R. Dunning, dean, School of Engineering, Columbia U.

"The Impact of Refrigeration on Our Modern Era," Dr. Samuel C. Prescott, dean emeritus of science, Massachusetts Institute of Technology.

"Whither Mankind—and Air Conditioning," George S. Jones, Jr., managing director, Air-Conditioning & Refrigeration Institute.

Sunday Closing Law--

(Concluded from Page 1, Col. 4) be commenced."

The law provides a fine of \$25 for the first offense and subsequent penalties of a fine of not less than \$50 or more than \$100 and jail terms of not less than five days or more than 30 for repeated offenses.

Sturm said he was invoking the law because Sunday operations of the six stores, which sell television, furniture, floor coverings, and appliances, constituted unfair competition to stores which his union represents that do not operate on Sunday.

Sturm's union claims to represent about 3,000 workers in the retail field, many of them employed in downtown department stores that do not open on Sunday.

His union has contracts with two supermarket chains that operate on Sunday, but he said that a 1936 Ohio Supreme Court decision excepts food stores from the law.

The law provides exceptions for "work of necessity or charity" and for persons who "conscientiously observe the seventh day of the week as the Sabbath and abstain thereon from doing things prohibited on Sunday."

Establishments to which Lawton mailed letters were Shea's Electric Appliance Co. (Warehouse Div.), 914 Berdan Ave.; Town and Country Building and Decorating Center, Inc., 4221 Monroe St.; Ralph Coal & Supply Co., 873 Western Ave. (which Sturm says sells appliances on Sunday); General Appliance Co., 1024 South Ave.; Little Bargain Barn, 2324 Woodville Rd.; and Hofman Furniture Co., 1608 Cherry St.

Sturm said he plans to make similar complaints to Harry Friberg, county prosecutor, about four stores located outside the city limits which he says transact Sunday business.

No Dividend at American Motors

DETROIT, Aug. 26—Directors of American Motors Corp. today took no action on a dividend.

George W. Mason, president, said that "consolidation of Hudson and Nash-Kelvinator is proceeding satisfactorily towards economies of operation, strengthening of field organization, and realization of the other advantages of the merger, but the directors thought it advisable to conserve working capital at this time."

IDEAL

Speed-Freeze

PRODUCTS

BEVERAGE COOLERS AND INSTANTANEOUS DRAFT BEER COOLERS.
(With Refrigerated Faucets)

WRITE
IDEAL COOLER CORPORATION
2932 EASTON AVE. • ST. LOUIS 8, MO.



TECHNICIAN STORES batch of polio vaccine in one of six such walk-ins at Wyeth Laboratories, Marietta, Pa. Three hold temperatures of 38° for storage; three others at 98° for incubation of polio virus.

Refrigeration Aids Polio Work

New Vaccine Produced at Wyeth Laboratories Stored In Walk-Ins; Others Used as Incubators

MARIETTA, Pa.—Walk-in coolers are used both as incubators and refrigerators in the production of a new type of polio vaccine at Wyeth Laboratories, which is located here.

Three Bally deluxe walk-in coolers are serving as incubators and are operated at 98° F. to stimulate the growth of the polio virus implanted in the kidney tissue of monkeys. Another trio of Bally walk-ins, used as refrigerators, are cooled to 38° F. for the storage of the vaccine.

All joints and seams in the sectional coolers are completely airtight, thus assuring accurately controlled temperatures within the boxes.

Close temperature control is particularly vital in the growing of both the tissue cells and the virus.

Fiberglass insulation 5 in. thick is used in all the walls and floors. This heavy density insulation is covered on both sides with heavy water-proof paper.

The polio vaccine produced at Wyeth Laboratories is the same as that developed by Dr. Jonas Salk of Pittsburgh under the auspices of the National Foundation for Infantile Paralysis.

Wyeth Laboratories, a division of the American Home Products Co., was selected by the National Foundation as one of the producers of the vaccine. Wyeth research men, working in cooperation with Dr. Salk, have developed many

new techniques in producing the material.

To date, approximately 650,000 children have been vaccinated in test centers throughout the country. Until tests prove successful, the vaccine will not be made available to the public. Test results are expected by the end of the summer polio season.

Philco Pricing--

(Concluded from Page 1, Col. 3)

the announced policy of Philco to put real value into its distributor and dealer franchises. Certainly joining a price war would not support such a policy, especially when there is no real need for such drastic action.

"We believe it is absurd for us to continue to lose money for ourselves, for you, and for your dealers in selling top quality merchandise below cost," Rich said in a letter to distributors announcing the action. "We are not going to join the rat race by footbalting Philco's room air conditioner line."

"We want Philco lines sold on a decent legitimate basis. If not, we will have gained no ground nor made any real contribution to our dealers, the industry, or to our own future. And most assuredly selling below cost from manufacturer to dealer is no way to build a sound, profitable business," Rich concluded.

Will Buy
1954 Room Air
Conditioning Units
in

Original Crates
Will Pay Cash

Contact

PAULSON ENGINEERING CO., INC.

510 POYDRAS STREET, NEW ORLEANS, LA.

RA. 2326

400 Mfrs. Take Space For ASHVE Exposition

NEW YORK CITY—Plans for the 12th International Heating & Ventilating Exposition are far advanced, and nearly 400 manufacturers have already engaged exhibit space, it was reported recently.

As previously announced, the exposition will return to Philadelphia, Jan. 24 to 28 next, sponsored by the American Society of Heating & Ventilating Engineers. It will be even larger than the last display at the Commercial Museum and Convention Hall there in 1951, or that at Chicago in 1953, according to the report.

Lively interest will focus on improvements in air conditioning equipment, stimulated by firming demand and widening production, it was stated.

Petterson Heads Norge Dealer Development

CHICAGO—Formation of a dealer development department to give direct sales and promotion aid to retail appliance stores was announced recently by the Norge Div. of the Borg-Warner Corp.

Jack Petterson has been appointed manager of the new department, R. C. Connell, director of sales, disclosed. He joins the appliance manufacturer from a position as account executive with Leo Burnett Co., Chicago advertising agency.

This department represents an innovation in the appliance selling field, Connell declared. The Norge program will include development of local promotions tailored for specific markets and local conditions, dealer sales training, and store management aid, he explained. It will be coordinated with programs of Norge distributors.

"Norge is taking a positive step toward improving its dealer-manufacturer relations," Connell declared. "Despite all the talk in the appliance industry about the need to improve retail sales methods, manufacturers in general have given little direct, effective aid to dealers. This program will be of great assistance to Norge dealers."

Petterson has an extensive background in the appliance selling field. Previous to his association with Leo Burnett, he was general merchandising manager for Polk Brothers Central Appliance Co., Chicago store chain, and assistant advertising manager for Motorola, Inc.

Deepfreeze Picks Collier As Memphis Zone Chief

NORTH CHICAGO, Ill.—Appointment of Charles W. Collier as Memphis zone manager has been announced by L. R. Walker, manager of field sales, Deepfreeze Appliance Div., Motor Products Corp.

Collier has had several years' experience in the appliance field.

Sunroc Milk Dispenser Gets New York Approval

GLEN RIDDLE, Pa.—Sunroc Refrigeration Co. has announced new Model M1, bulk milk dispenser. The Sunroc milk dispenser is the only design approved for use in New York City in over 10 years, the company claims. New York City is considered the strictest municipality in the nation in this respect, it said.

The Sunroc milk dispenser is a self-contained, refrigerated bulk milk storage and dispensing unit. It holds 2 20-qt. milk cans in an all stainless steel cabinet.

Features include can design; the airtight, watertight, dust and dirt proof recessed tube cavity; the single service dispensing tube; the refrigerated, sanitary dispensing system; and the condensate channel assembly.

The Sunroc single service dispensing tube is manufactured to the proper length for use and sanitary wrapped before shipment. It is never touched from the time it is installed at the dairy.

It is extremely unlikely that the tube can be contaminated by insects while in use because of the Sunroc patented "Cold Well" principle, nor can condensate water from tube, can, or cabinet drip into the milk being drawn, because of the sanitary Sunroc dispensing device.



ACCEPTING HIS NEW Studebaker is Robert Puckett, Servel district sales manager in Detroit (second from right). At the presentation ceremony are (from l. to r.) Neil Schuman, field sales manager, Servel, Inc. appliance division; W. K. Grube, midwest regional sales manager for Servel; Stuart Maclean, major appliance manager of Morley Bros., Servel distributor in Detroit; Puckett; and Norman Diment, manager of Morley's Servel division in Saginaw, Mich.

Detroit Sales Mgr. Wins Servel Contest

DETROIT—Robert B. Puckett, local district sales manager for Servel, Inc., got a real nice send-off just before leaving on his vacation.

Neal E. Schuman, field sales manager of Servel's appliance division, presented Puckett the keys to a new Studebaker at a surprise luncheon at the Sheraton-Cadillac hotel here.

Puckett was awarded the car for capturing first place in the first phase of the manufacturer's national "Big Needle" contest for district sales managers. He covers Michigan and portions of Ohio and Indiana.

The contest was based on the sale of all Servel home appliances from Jan. 2 to July 2 this year.

Phil Arnold, district sales manager in Los Angeles, took second place, winning \$1,000. The third place prize of \$750 went to Raymond Lubar of Washington, D. C.

The second phase of the contest is now under way. Winners will be announced at Servel's annual convention in early December.

This contest will be based on appliance sales credited to the district managers from July 3 to Nov. 26. Prizes will duplicate those awarded in the first contest.

I-H To Co-Sponsor 'Halls Of Ivy' on TV This Fall

CHICAGO—International Harvester Co. has signed to sponsor "The Halls of Ivy," marking Ronald Colman's long-awaited television debut. The series of half-hour programs will be seen in the nation's top markets, starting in October.

The sponsor will advertise the company and its entire line of products, with major emphasis on refrigeration and motor trucks, it was announced by M. F. Peckels, manager of the consumer relations department of International Harvester Co.

International Harvester has authorized Milton A. Gordon, president of Television Programs of America, producer of "The Halls of Ivy," to negotiate for co-sponsorship in order to permit the widest possible national coverage of this top-quality program.

Depending on availabilities, the program will either be broadcast on a network or on a wide national spot basis, according to Leo Burnett Co., Inc., the advertising agency producing the show.

Details of markets and coverage will be announced later.

Co-starring with Colman will be his wife, Benita Hume, both of whom also played the leads in the famous radio version of "The Halls of Ivy."



More economical • Easier to shape and bend

Bohn aluminum refrigeration tubing helps reduce costs because it is easier to form. It also works more efficiently in the finished product because aluminum is an excellent heat conductor. Bohn aluminum refrigeration tubing is available in bulk coils, specified patterns or cut to required lengths with dependable, flash-butt welded copper leads.



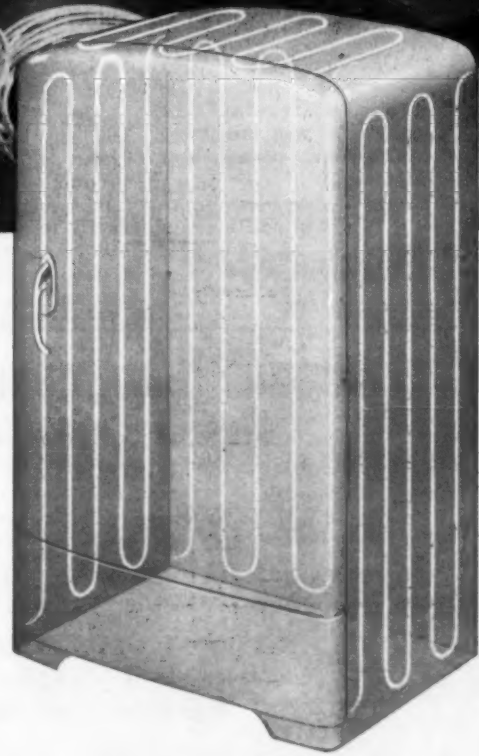
NEW BOOKLET
"Bohn Products and How They are Made."
Write for free copy of this pictorial tour through Bohn plants.

EVAPORATORS • FREEZING PLATES • TUBING • COILS AND CONDENSERS

BOHN ALUMINUM AND BRASS CORPORATION

1400 LAFAYETTE BUILDING • DETROIT 26, MICHIGAN

Sales Offices: • BOSTON • CHICAGO • CLEVELAND • DAYTON • DETROIT
INDIANAPOLIS • LOS ANGELES • MILWAUKEE • MINNEAPOLIS • MOBILE
NEW YORK • PHILADELPHIA • ROCHESTER • ST. LOUIS



SHELL CONDENSER APPLICATION of Bohn aluminum refrigeration tubing for either chest or upright freezers.

GREATER PROFITS FOR ALL!
WITH THE
NOLIN Moisturizer
VEGETABLE CASE

AVAILABLE IN 5' - 8' - 10' SIZES
If It's Not a NOLIN, It's Not a MOISTURIZER

NOLIN MANUFACTURING COMPANY
1400 LLOYD ST. PH. LD 57
MONTGOMERY, ALABAMA

Norge Appoints Runge Advertising Manager

CHICAGO—Robert J. Runge has been appointed advertising manager of the Norge Div. of the Borg-Warner Corp., R. C. Connell, director of sales, announced recently.



R. J. Runge

Runge joins Norge from a position as advertising and sales promotion manager of Thor Corp. He was appointed to the latter position in 1950.

Previous to that, Runge was sales promotion manager of the plumbing and heating division, Crane Co., Chicago.

In his new position, Runge will direct Norge's expanded advertising program, Connell said. The company plans a record advertising and promotion campaign for the balance of 1954. It will be directed primarily at developing retail sales on the local level.

Distributor Takes 32-Page Ad Section To Push Lines

CLEVELAND—A 32-page tabloid advertising section, the largest ever to appear in the Cleveland Press, was used recently by Main Line Cleveland, Inc. and 78 of its dealers to promote new television and appliance product lines.

In addition, several pages of tie-in advertising were inserted in the regular part of the Monday paper.

Main Line and its dealers employed the intensive promotion effort as a stimulant to the entire appliance industry in the area and planned an extensive merchandising program to follow up on it, it was said.

The supplement was filled with dealer ads and bits of editorial copy giving news information about the various items advertised. The advertisements were somewhat unusual in that each was concerned solely with a single model in one of the lines carried by Main Line, thus giving complete coverage to each line. However, each advertisement was in the name of a different dealer, whose store name and location were featured.

The supplement promoted the RCA line of television, air conditioning, and appliances, Whirlpool laundry equipment, and Cinerator disposal units.

Sloan Heads Appliance Sales for Ray Thomas Co.

LOS ANGELES—R. S. (Bob) Sloan has been appointed Appliance Div. sales manager of the Ray Thomas Co., it was announced by C. W. Crawford, president of the distributorship.

His last post before resigning to take the Ray Thomas position was district manager of Consumer Products, Westinghouse Electric Supply Co., San Francisco.

Mel Boldt To Design All Crosley, Bendix Appliances

CINCINNATI—Mel Boldt, head of the Chicago industrial design firm that bears his name, has been named to design all Crosley and Bendix home appliances.

Parker H. Erickson, Avco Mfg. Corp. vice president and appliances general manager of the Crosley and Bendix divisions, announced that Boldt, who claims credit for designing the first "perfectly matched washer and dryer" as well as the Bendix Duomatic all-in-one washer-dryer, now has been engaged to design Crosley appliances also. Boldt has been designing all Bendix home laundry equipment since 1943, when he joined the staff at Bendix.

Two Distributors Divide Maine for Deepfreeze

NORTH CHICAGO, Ill.—Two new distributors for Maine have been appointed by Deepfreeze Appliance Div., Motor Products Corp., according to L. R. Walker, manager of field sales.

The firms are Edwards & Walker Co., Portland, and Standard Electric Co., Bangor.

Edwards & Walker will serve nine western counties, including the cities of Portland, Augusta, Rockland, and Lewiston, plus Carroll county, N. H., while Standard Electric will cover seven eastern counties, including the cities of Bangor and Houlton.

Daisy F. Walker is president and Frank E. Walker, vice president of the Portland firm, which was founded more than 75 years ago. Julius Stone is owner of the Bangor company, established in 1946. Both firms also distribute Universal home laundry equipment.

Previously Maine state was a single distributor territory for Deepfreeze.

Norge Adds Budget-Priced Electric Clothes Dryer

CHICAGO—A budget-priced model electric clothes dryer was introduced recently by the Norge Div. of Borg-Warner Corp.

Judson S. Sayre, Norge president, told distributors during a meeting in Chicago that the new dryer will retail for \$149.95. He said that the new 1955 model is fully automatic and full size, with a drying performance equal or superior to that of higher priced competitive models.

Recently completed tests on the new appliance demonstrate its ability to perform satisfactorily using only 110-115-volt current, as well as the normal 220-volt line, Sayre continued.

The new dryer, model number 600, is now in production at Norge's Effingham, Ill. plant, as is production on the companion gas model number 700G, which will retail at \$189.95. In addition, Norge is stepping up production schedules on its Time-Line model gas and electric dryers, Sayre said.

INSIDE DOPE

Learn to live and laugh—
Thus delay your epitaph

By GEORGE
F. TAUBENECK

(Concluded from Page 1, Col. 1)

So full of Beauty—beneath its covering—
That you will find earth but cloaks your heaven.

Courage then to claim it: that is all!

But courage you have; and the knowledge that we
Are pilgrims together,
Wending through unknown country, home.

And so, at this time, I greet you.

Not quite as the world sends greetings,
But with profound esteem and with the prayer

That for you now and forever,
The day breaks, and the shadows flee away.

—FRA GIOVANNI—1513 A.D.

Quotes of the Week

Knowing how to keep people happy is getting to be almost as important to success as work and talent.—*Esquire*.

Generations of schoolboys taught only techniques and tools produce generations of men to whom only techniques and tools are important.—*American Scholar*.

Be a booster—never a knocker—and you'll reap dividends in friendship and sales.—H. K. DUGDALE.

Literature is the armory in which the weapons of the human mind are laid up, and from which, when required, they can be quickly drawn.—HENRY BUCKLE.

"Ladies and Gentlemen, these things are books," headlines a Lippincott advertisement. "They keep quiet. They do not suddenly dissolve into wavy lines or snow-storm effects. They do not pause to deliver a message from their sponsors. And every single one of them is three-dimensional—they have length, breadth, and thickness for convenience in handling, and they live indefinitely in the 4th dimension of time."

He that loves reading has everything within his reach. He has but to desire, and he may possess himself of every species of wisdom to judge and power to perform.—WILLIAM GODWIN.

Life is something like a bowl of soup. When you are young you go right at it. You burn your tongue. You miss the delicacy of

life's flavor, and it is only when you have the wisdom to blow a little on the spoon that you can really appreciate fine subtleties and delicate nuances.—*Kiwanis Magazine*.

Hammock Philosophy

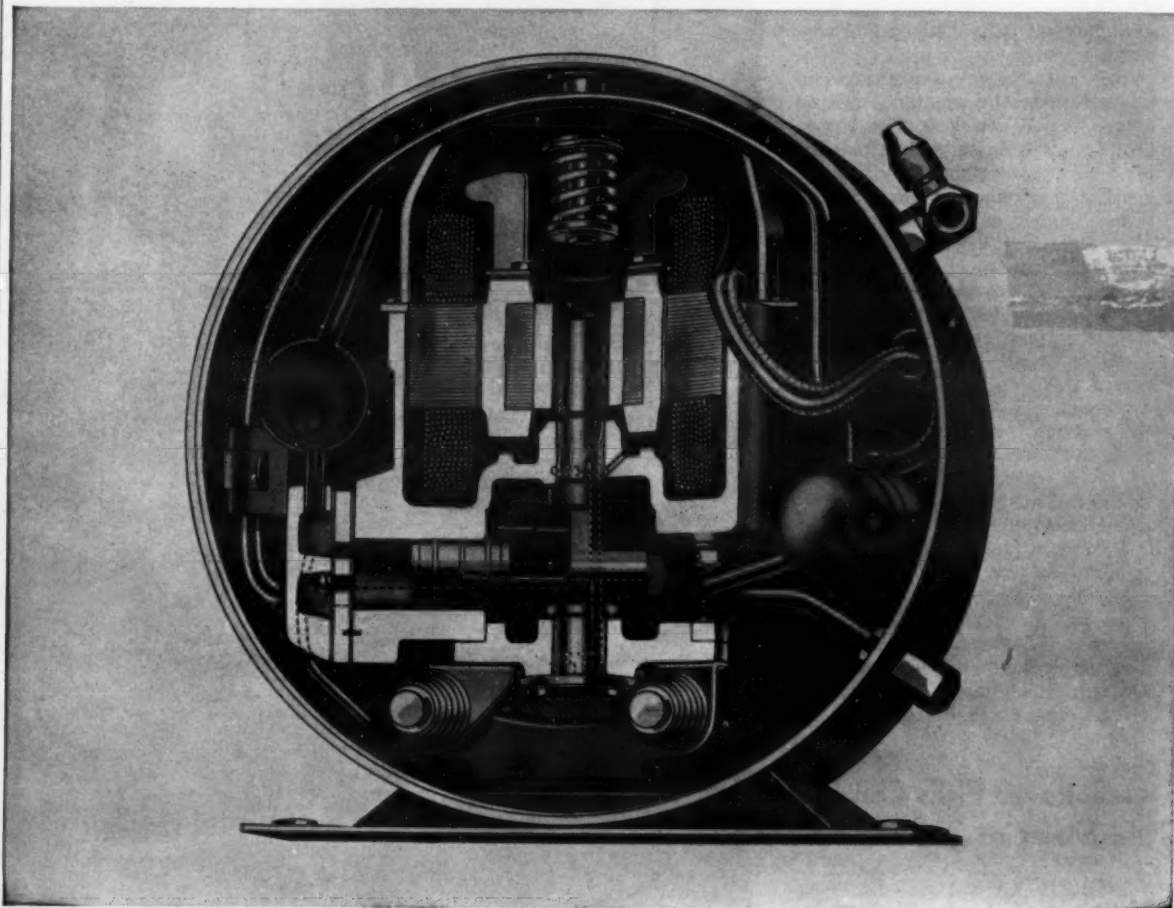
We begin to understand that maturity means meeting problems as best you can—not yielding to them, but not blowing your top when they fail to yield.—ERIC SEVAREID.

Education has now become the chief problem of the world. The nations that see this will survive, and those that fail to do so will slowly perish.—G. STANLEY HALL.

Great people are not affected by each puff of wind that blows ill. Like great ships, they sail serenely on, in a calm sea or a great tempest.—*Megiddo Message*.

It seems fairly clear that in our time the inability to read prose and poetry of meaning and substance is becoming more and more widespread; and that the faculty of attention in general is undergoing a wholesale displacement away from ideas and abstractions towards things and techniques.—CLIFTON FADIMAN.

The dead take to their graves, in their clutched fingers, only that which they have given away.—ROUSSEAU.



Kelvinator refrigeration systems assure dependable performance of bottle coolers manufactured by a large vending-machine company. Above, cross-section view of internally mounted compressor used in these bottle coolers. Bundyweld helps keep these units trouble-free.



Behind the reliability of Kelvinator units — Bundyweld Tubing

DISTRIBUTORS AND DEALERS ONLY

Major manufacturer of commercial refrigeration products disposing of overstocked inventory of current models.

Prices well below factory costs.

MEAT CASES — OPEN & CLOSED
DELICATESSEN CASES — OPEN & CLOSED
PRODUCE CASES — OPEN & CLOSED
REACH-IN REFRIGERATORS
WALK-IN COOLERS

For specifications and prices, write to Box 4469,
Air Conditioning & Refrigeration News.

WHY BUNDYWELD IS BETTER TUBING



Bundyweld starts as a single strip of copper-coated steel. Then it's...



continuously rolled twice around a tube of uniform thickness, and



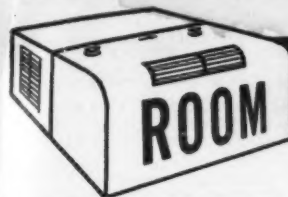
passed through a furnace. Copper coating fuses with steel. Result...



Bundyweld, double-walled and brazed through 360° of wall contact.



NOTE the exclusive Bundy-developed beveled edges, which afford a smoother joint, absence of bead and less chance for any leakage.



AIR CONDITIONERS

Ted Nemes Will Head Sales For Unarco Distributor

CHICAGO—Ted Nemes has been named vice president and general sales manager of the Whitehall Engineering Co., distributor of Union Asbestos and Rubber Co.'s air conditioning products, it was announced recently by Norman Weinstein, president.



Ted Nemes

Nemes, who resigned as national sales manager of the Admiral Corp.'s air conditioning division effective Aug. 13, will join Whitehall Aug. 23, Weinstein said.

He added that Nemes will supervise national sales of Unarco's new mobile air conditioner. He will also be in charge of regional distribution here for Unarco's line of packaged air conditioners.

Whitehall, Weinstein explained, distributes Unarco's mobile room air conditioner nationally and

other Unarco air conditioning products in the Chicago area only. Nemes headed the national sales force of Avco's Crosley air conditioning division before going with Admiral.

He began his business career with the Nash Motor Co. in 1927, following his graduation from the University of Pittsburgh.

Nemes left Nash to join the York Corp. and from there went to the Fedders-Quigan Corp. as assistant sales manager and field sales manager.

F & D Distributes UsAirco In Utah and Idaho Areas

SALT LAKE CITY—F & D Distributors, Inc. here has been named a distributor by the United States Air Conditioning Corp. for its packaged air conditioners, self-contained central station air conditioning plants, and self-contained water chillers.

F & D, which is headed by M. L. Frank, president, will merchandise the UsAirco products in Utah, Idaho, and bordering areas in Wyoming and Montana.

Des Moines May Levy Tax On Window Conditioners

DES MOINES, Iowa — Des Moines residents will probably have to pay personal property taxes on their window air conditioning units, Bert L. Zuer, city assessor, declared recently.

He determined that they are legally taxable property, as are home freezers, and are not covered by the exemption that applies to refrigerators. But he seemed to be in doubt as to whether or not he would assess them.

He indicated that there had been no question about air conditioners raised before, but it would probably come up at a meeting of the Iowa Association of Assessors in October.

Zuer also said that a ruling on air conditioners is expected from the state tax commission.

To Cool Judge's Chambers

CHATTANOOGA, Tenn. — Air conditioning units were scheduled to be installed in the chambers of Federal Judge Leslie R. Darr, including units in the library and reception office.

Judge Darr, who has recessed court until Aug. 30, expressed the hope that the "government might see fit" to air condition the courtroom also before next summer's heat begins.

Doyle Heads Freezer, Air Conditioner Divs. For Admiral Corp.

CHICAGO — William B. Doyle has been appointed sales manager of Admiral Corp.'s freezer and room air conditioner divisions, according to W. C. Johnson, vice president - sales. Doyle has been freezer sales manager since November 1952.



W. B. Doyle

Formerly a refrigeration representative for International Harvester Co. in southern California and Arizona, he entered the appliance business in 1946 with a Grand Rapids, Mich. distributing organization.

Later Doyle became sales manager of Admiral's San Diego distributing division, moving from there to company headquarters in 1952.

Doyle replaces Ted Nemes, former air conditioner sales manager, resigned.



Aluminum Window Grille Screens Air Conditioner

MEMPHIS—An aluminum window grille fashioned in a pattern of oak leaves and acorns has been designed by the Tennessee Fabricating Co. here to screen the exterior of air conditioning units.

The grille, which has a high gloss white enamel finish, is adjustable to fit all types and sizes of windows.

Because of the open grillework, the efficiency of the air conditioner is not impaired, but the unit is effectively concealed from view, the company said. The grille can be installed by the homeowner in less than 10 minutes with a screwdriver the only tool required.

The manufacturer states that the grille, because of its unique design, also can serve as a window flower box, exterior shutters, and other applications.

Retail sale price is set at \$22.50.

\$9,000,000 Spent by St. Louisans This Summer To Keep Cool

ST. LOUIS—Union Electric Co. executives recently estimated that St. Louisans already have spent \$9,000,000 to keep cool via air conditioning this summer.

And this is for the air conditioners alone. The estimate does not include money spent on electricity to keep the units operating, which amounts to 12 to 15% of the electric power used in this area. The air conditioning load is estimated to be 168,000 kilowatts—or enough to take care of Omaha's residential needs.

A company spokesman said about 30,000 room-type air conditioning units have been sold here so far this summer, bringing the total to about 60,000. In 1950, he said, there were only 5,400, and, before that, the number was negligible. Each unit averages about \$300, he said.

Fedders Gets \$2,000,000 Contract for Shell Cases

BUFFALO—The Fedders-Quigan Corp. has received an Army contract of nearly \$2,000,000 to produce artillery shell cases and is reactivating a leased plant at 260 Court St. to do the job.

Anthony J. DeFino, vice president of Fedders-Quigan and general manager of its Buffalo Div., said work has "just started" on reactivating the Court St. unit. This plant was shut down in the spring, idling several hundred workers.



"Coca-Cola" and "Coke" are the registered trademarks which identify the product of The Coca-Cola Company.

Bundyweld helps these carefully designed, well-engineered bottle coolers give top performance—all the time.

Product reliability has played a major role in the successful operation of American Motors Corporation's Kelvinator Division, manufacturer of refrigerators, refrigeration units.

The same product reliability lies behind the success of a large vending-machine company which is a customer for Kelvinator refrigeration systems.

Naturally, both companies have a vital concern in the use of a dependable tubing in these refrigeration units. It follows that both manufacturer and customer benefit from the use of trouble-free Bundyweld Tubing. Here are a few good reasons you, too, can rely on Bundyweld:

The tubing itself: Bundyweld is leakproof; thinner-walled yet stronger; has high bursting strength, high thermal conductivity; takes easily to standard protective coatings. Bundyweld's reliability has made it the standard of the refrigeration industry for over 20 years.

Bundy extras: In addition to the world's most dependable small-diameter tubing, we offer you unexcelled fabrication facilities; expert engineering help; custom-packaging of orders; prompt, on-schedule deliveries. For untiring assistance, prompt information on your tubing problem, call, write, or wire us. Bundy Tubing Company, Detroit 14, Michigan.

Demand IS FOR

CLEANABLE WATER-COOLED CONDENSERS

MORE EFFICIENT DOUBLE-TUBE COUNTER-FLOW DESIGN

"New unit" efficiency is always maintained with H & M water-cooled Condensers because they are *cleanable*—quickly, economically. Do as the industry does—demand nothing less, for the cost is no more. Write for Catalog.

WHOLESALE IN PRINCIPAL CITIES

Halstead & Mitchell

BESSEMER BLDG. • PITTSBURGH 22, PA.

EXTRA PROFITS BLOWING YOUR WAY

with INTERNATIONAL AIR CONDITIONER COVERS

MADE OF **Firestone Velon**

Experts predict 1,500,000 air conditioners will be sold this year! Get your share of the booming market for covers with **INTERNATIONAL** the first, the finest made of genuine Firestone Velon. It's heavier, it's trouble-free, it's the best made. Get the jump on the market... let us show you how with our cooperative advertising plan... get the facts.

INTERNATIONAL COVERS, INC.

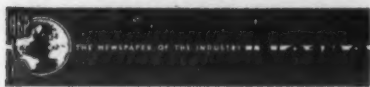
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DOUBLE-WALLED FROM A SINGLE STRIP

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What Won't They Think Up Next?

Random scientific researchers are studying at-first-glance obscure matters these days—such as the possibilities of salt water farming, and what the weather has to do with the behavior of glaciers.

Other researchers have been working on equally unfascinating assignments. Their accomplishments are revealed in announcements of such new products as "kissproof" garlic sauce. (Don't snort, please. Read on).

Promising to All Mankind is a salt water farming project whenging away on one of the Hawaiian Islands. (If you want to look into this business further, Molokai is the island, and wonderfully-named Dr. Gordon T. Nightingale is the man who heads up the experimentation). Out there salty truck crops are doing better than the project director had figured they could. Aloha to you, doctor, and to Molokai Ranch Co. and the Industrial Research Advisory Council which pays the bills.

We don't know how things are going for the team of scientists who departed last summer for Lemon Creek Glacier in the Alaskan ice field. In the absence of news to the contrary, we assume they're hard at work on their job of seeing what's what as to glacier behavior relations and the weather. The American Geographical Society is running this adventure for the U. S. Army and Air Force. Preliminary reports augur well for the air conditioning industry. It seems that places and people are hotting up all over.

We hope things turn out bully, also, for the scientists at General Electric Co.'s Research Laboratory. These ardent test-tubers are seeking clues to stronger and more interesting metals. It may intrigue you to hear that they are busy giving "the full treatment" to soap bubbles. They've discovered that bubble growth is akin to the growth of crystals in metals. No kidding?

They'll Do It Every Time Jimmy Hatlo



You might be interested, too, in the news that the West Coast is going to get its first model seaplane towing basin. Convair Div. of General Dynamics Corp. will construct it at San Diego. Reason: further development of jet and turbo-prop seaplanes. Plans call for the 700-ft. lab to have two 300-ft. towing basins and 100-ft. turning basin. And for what? Those model planes which kids assemble and buzz you nuts with.

Are you still with us?

We turn now from research to news on the results thereof.

All hail, first of all, to the researchers who came up with a product which the world has been waiting for with bated (this adjective was allowed here after assiduous dictionary research failed to come up with a better) breath: A "kissproof" garlic sauce.

Derry Products Co. of Brooklyn has revealed glad-or-not tidings (depending on distance) that its new garlic sauce retains seasoning value, while hiding after-taste and after-breath. Good news for suitors of Italian girl-friends!

Paeans also to the Pop-Drop Beverage Co. of St. Paul. This firm advises that by dropping a tablet into a glass of cold water, you can produce non-fattening soda pop at home. In root-beer, lime-lemon, and orange flavors, yet.

Additional great news from Franchot Tone's family enterprise at Niagara Falls. Deep study by Carborundum engineers has produced a product (designated, with walloping imagination, "Highway Safety Grain") which promises to reduce auto accidents due to slippery-when-wet roads. When spread on a damp asphalt highway, this aluminum oxide abrasive cuts by one-third the stopping distance of autos.

Science forges ahead. There's good news tonight!



OFF THE CHEST

Civilian Personnel Office,
3906 Air Base Group,
APO 117, c/o PM, New York, N. Y.
Editor:

I know it will be of interest to your publication to know that in Africa we do very much appreciate, and anxiously await the arrival of each issue of AIR CONDITIONING & REFRIGERATION NEWS.

To fully appreciate the real value of the NEWS, such items as time movements of the industry and new products; such priceless articles on service, installations, and repairs so well presented that even the beginner can understand, one really has to be in such a remote, out of the way Base as the one at which I am now stationed.

Even though it is sometimes four or five weeks before we receive it here, the NEWS still brings us up to date, and keeps us far in advance of our ever fast moving U. S. industry of air conditioning and refrigeration.

In short, reading the NEWS anywhere in the world definitely brings one back stateside to the good old U. S. A.

I am certain I speak for a considerable number of Americans here overseas, who possibly have not admittedly made it known to you personally, but do feel exactly like myself, lost anywhere without the NEWS to read.

To the men overseas, do write the publishers of AIR CONDITIONING & REFRIGERATION NEWS, give them your gripes, ideas, and views because such criticisms are their

tools to give you what you desire on any item in the air conditioning and refrigeration industry. They really know it!

Having been a reader of Business News publications for a short period of 27 years, I know what I'm talking about. To me it is the best for keeping up with the industry.

ERNEST E. CONDON

Houdaille-Hershey Corp.
Detroit, Mich.

Editor:

Knowing that you have been a leader in the effort to curb the deaths of children in discarded refrigerators, I thought you would appreciate the enclosed comic strip taken from yesterday's *Chicago Tribune*. I am not positive that I agree with Mr. King in that the locks couldn't be knocked off because I would guess the best bet would be to knock the locks off and then give them to the junk man. However, he has certainly done a public service by writing a strip such as this.

We always enjoy your fine publication and I am particularly interested when your refer to your bygone days with the *Marshall Herald*. This is of particular interest to me since I lived with Mr. Willard Potter for four years at the University of Illinois and I gather that your days on the *Marshall Herald* were at the time that Willard's late father operated the publication.

RUSSELL A. JOHNSON



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WRITE FOR BULLETIN U-210

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Residential Air Conditioning

Steamfitters Get Nod Over Plumbers In Buffalo Test Case

BUFFALO—Because the pipe in question was open at both ends and not connected to the old line, City Judge Frank A. Sedita ruled that steamfitters were justified in working on it and were not doing plumbing work.

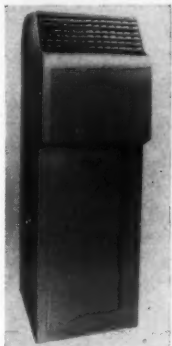
The question rose in a city ordinance dispute between members of Steamfitters Local 395 (AFL) and Plumbers Local 36 (AFL). The plumbers charged that steamfitters were doing plumbing work at an extension of the Armour & Co. packing house.

Judge Sedita determined that the case revolved around a certain length of pipe in a sausage room. After hearing considerable conflicting testimony, he went out to the plant to look at the situation himself.

Attorney Samuel D. Magavern, representing the steamfitters, described this as a test case.

Winkler Residential Unit Adapts to Commercial Use

LEBANON, Ind.—After a year of field testing, the 1954 Winkler self-contained central air conditioner line is now being offered to dealers by the U. S. Machine Div. of Stewart-Warner Corp. here.



The line includes 2 and 3-hp. air-cooled and 2 and 3-hp. water-cooled models. A combination summer and winter control panel and thermostat is regular equipment with all models.

Primarily designed for residential use, the unit can be converted to a commercial cooler with two additions. A hood is placed on top to deflect air and an adapter is set over the filter for return air. By adding side registers, air may be moved in two or three directions.

Installation requires two openings in the wall, the company said, one for bringing in air and the other for exhaust.

Stripped of the hood and adaptor, the standard home cooling conditioner can be used in conjunction with a present furnace, or by itself in basement, utility room, or attic. Built in two sections it may be stacked or, where head room is limited, the top section can be based on the floor behind the condenser blower and motor.

Casing of the standard unit is 26 in. sq. and 67½ in. tall when stacked and 26 by 52 by 40½ in. when the top section is placed on the floor.

The unit is equipped with hermetically sealed compressor, has 440 sq. in. filter area, and has "over size" fans mounted on rubber. The cabinet is finished in Winkler baked-on enamel and made of heavy-gauge steel.

U. S. Machine Constructs Addition to Main Plant

LEBANON, Ind.—A new building program necessitated by continuing expansion of the Winkler line of heating and cooling equipment is being carried out by Stewart-Warner Corp. at its U. S. Machine Div. here.

A one-story brick addition, containing nearly 50,000 sq. ft., is being erected at the largest of its three plants in Lebanon, and should be ready for occupancy

around the first of the year.

In addition to providing increased manufacturing facilities, one section will be converted into office space to relieve congestion in administration offices.

Fifty new models of heating equipment to burn oil, gas, and coal; room air conditioners, air-cooled and water-cooled central air conditioning units for domestic and commercial installations, and a complete line of gas and electric water heaters were introduced this year.

Further additions to the Winkler line and a comprehensive advertising and sales promotion program will be announced at dealer meetings in November and January.

Norman Products Outlines Plans for Residential Unit

COLUMBUS, Ohio — Specifications and applications of the new Norman winter-summer residential air conditioner were discussed at a recent regional managers' meeting at the Norman Products Co. headquarters here.

Homer Schmitt, recently appointed to direct the company's development of the product, lead the discussion. Charles Reichelderfer, Norman's chief engineer, covered the engineering details.

The company also revealed to the regional managers its sales and marketing program for the year and its new advertising program.

Two New Applications

For Homes with Radiant Heat or Inadequate Furnace Blower, Install Unit In Attic

DAYTON — Chrysler Airtemp engineers have suggested two new air-cooled air conditioning applications for homes with radiant floor heat or a warm air heating system that does not have a distribution system suitable for cooling, or, homes with an adequate warm air distribution system but insufficient blower capacity for cool air.

A self-contained, air-cooled packaged air conditioner is located in the attic above the central hall of a radiant floor heated residence. The hall ceiling is furred down approximately 8 in. to make a plenum chamber.

Cool air supply registers then are cut into this plenum chamber from each of the rooms above the entrance door. Each register then is equipped with squeeze dampers to regulate the air flow to each room.

The air-cooled packaged air conditioner contains all of the blowers and equipment necessary for air conditioning. No water supply is necessary. If the unit must be located a considerable distance from the attic louvers, Airtemp recommends that the condenser refrigerant cooling air be introduced and exhausted through attic ducts.

For homes with an overhead warm air distribution pattern but insufficient furnace blower capacity, Airtemp suggests that a packaged air-cooled air conditioner be installed in the attic space above the furnace room.

The air conditioner blower is connected to the installed distribution system with a duct damper positioned for either summer or winter operation. This system would require a separate air return grille in the ceiling.

During the winter, the air conditioning unit would be cut out of the system, and return air would normally proceed through the furnace to the system. In summer, the furnace would be cut out and the damper closed over its discharge duct.

Return air would be drawn through the ceiling grille to the air conditioner above, cooled, dehumidified, and then distributed throughout the system by the air conditioner.

No water supply is required. There must be a large enough attic opening or ducts for the introduction and exhaust of outside air used in place of water to cool the refrigerant.

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WATER
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QUICKLY...EASILY
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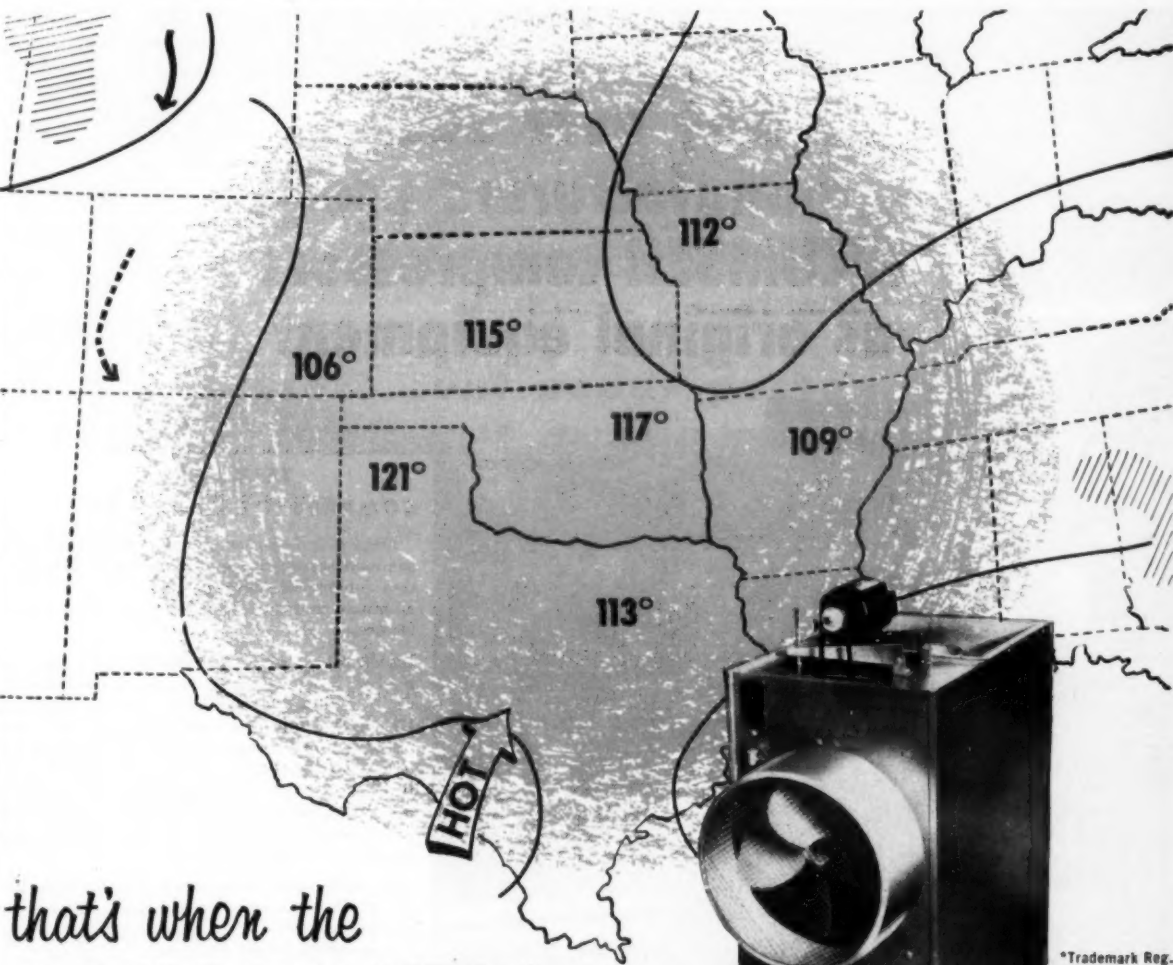
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GET WAGNER'S
NEW ELECTRICAL
SERVICE CATALOG
MU-40



WAGNER ELECTRIC CORPORATION
6471 PLYMOUTH AVE., ST. LOUIS 14, MO.

AIR CONDITIONING ENGINEER NEEDED FOR SALES AND MERCHANDISING

Well-established Mid-West air conditioning manufacturer now expanding operations to enter commercial air conditioning field on a national basis. We are seeking a specialist in this field who has some technical knowledge of air conditioning, and who also is experienced in merchandising, selling, and appointing and training of wholesale distributors. The products are packaged air conditioners of medium size for residential or commercial use. Salary commensurate with ability and experience. Reply in confidence to BOX A5024, Air Conditioning & Refrigeration News.



that's when the
AQUATOWER* shines!

The sun that scorched Mid-America with more than 30 consecutive days of 100° plus temperatures really spotlighted Marley Aquatowers. It proved conclusively that water cools best and that Aquatowers cool water best.

During the heat wave, uncooled and under-cooled air conditioning units "popped-off" like firecrackers on the Fourth. At best, they delivered only "relative" cooling and that not even a close relative to the comfort cooling owners expect.

Meantime, Aquatowers by the thousands continued to do their job quietly and efficiently. Not a single case of failure of Aquatower performance or mechanical parts was reported to the Marley Company during the record-breaking hot spell. Proof again that when the heat's on, you'll be awfully glad you installed Marley Aquatowers!

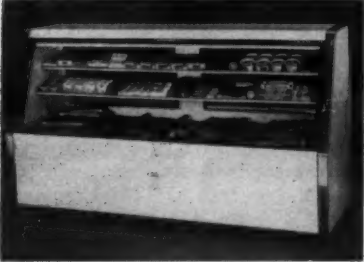
The Marley Company
Kansas City, Missouri



What's New

When requesting further information on new products, please use "Information Center" form.

Case Designed for Market with Narrow Aisles



—KEY NO. D-850—

SAN ANTONIO, Texas—Its new "Kleervue" DG8R "Floating-Air" display case, with an over-all width of only 77½ in. is an answer to the specific need of markets with restricted space and narrow aisles, according to Friedrich Refrigerators, Inc.

This new double-duty, scaled-down refrigerator is also designed to answer the needs of bakeries, the company said.

"The case is fitted with sliding doors for both top and bottom compartments, eliminating the need for extra room for door-swing," the manufacturer stated.

"The 3-shelf display arrange-

ment provided in the DG8R gives maximum display area, and the porcelain shelves are easy to keep clean. Full-length aluminum plat-ers rest on unichrome finish wire bar shelves.

"Excellent visibility is afforded the meat operator, who can see and reach all parts of the case with ease while working from the rear of the case. Tilted, adjustable shelves give the customer excellent visibility of all merchandise.

"Friedrich's patented Coolite lighting floods the interior of the case with non-glare natural light, with no distortion of colors."

All interior finishes of the DG8R are white baked enamel of special toughness, on Bonderized zinc-grip, paint-grip steel, the company said. Exterior is also of acid-resistant porcelain-on-steel, with stainless steel trim in "Empire" design.

Triple Thermopane glass is used in the front panel. Service doors are full-vision, sliding plate glass with chrome-plated handles. Insulation is Fiberglas, sealed against infiltration of moisture.

Bathroom Heater Radiates, Circulates Warm Air



—KEY NO. D-851—

PITTSBURGH—A new low-priced electric bathroom heater is now available from Westinghouse Electric Corp.

Designed to provide quick, economical heating in bathrooms and other small rooms, the new heater is simple and inexpensive to install, and costs little to operate, the company says. A flip of the built-in toggle switch provides immediate heat.

It provides heat both by radiation of infrared rays directly into the room and by circulation of warm air throughout the room. It has no moving parts. Heating elements are guaranteed against burnout for five years. Mounted flush with the wall, the grille is

either stainless steel or chromium plated.

The heaters are rated at either 1,250 or 1,500 watts, and operate on 115 volts a.c. Models for 230-volt operation are available on special order.

Grille dimensions are 20 in. by 10¼ in. Wall opening is 17¼ in. by 8¼ in. The complete heater weighs only 10 lbs.

Suggested list price for the heater is \$14.75, including Federal excise taxes, for either the 1,250 or 1,500-watt type.

2 Thermostatic Valves Cover Wide Range

—KEY NO. D-852—

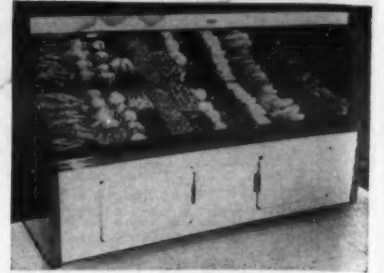
GLENDAL, Calif.—Two new thermostatic expansion valves with selective orifice capacity have recently been added to the General Controls Co. line.

A range of from .7 ton capacity to 3½ tons capacity is covered by the two valves—meeting most of the needs of domestic air conditioning equipment builders, the company said. The smaller valve, called the V-200G, is rated basically at 2 tons capacity, while the larger, the V-200H, is a 3½-ton capacity unit.

Both these variable controls offer external or internal equalization and adjustable superheat. They are part of the company's V-200 thermostatic valve series for refrigeration and air conditioning systems.

The V-200 valves operate satisfactorily in any position and in any temperature zone. They are supplied in conventional inlet and outlet sizes for pipe connections, flare connections, or sweat fits.

The valves are of a self-centering ball seat type and feature a built-in liquid line strainer plus low friction type action. These factors reduce service problems by making better performing valves, the manufacturer claims.



10-Ft. Vegetable Case Has 24-Sq. Ft. Display

—KEY NO. D-853—

BOONE, Iowa—A new combination vegetable storage and display case that offers 24 sq. ft. of display area and 45 cu. ft. of storage area has been introduced by the C. L. Percival Co. here.

The model 2700 vegetable case measures 10 ft. long, 38 in. deep, 73½ in. high at the rear and 36 in. high at the front. "Verd-A-Ray" lighting is used at the top of the case which is equipped with an extra large mirror.

Special feature of the storage compartment is the dual air volume controls, regulating air from the blower coil to the top display section and the lower storage compartment.



"Factory-prepared literature opens up leads for me," says Dan McKenzie, Biscayne Air Conditioning Co., Miami.

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why over 300 manufacturers use TECUMSEH compressors as original equipment

DEHYDRATING PROCESSES—



A view of Dehydrating Ovens on ¼ H.P. Single Line.

TECUMSEH COMPRESSORS ARE DRY . . .

Since moisture in any form is one of the most common reasons for field failure in a refrigeration compressor, Tecumseh takes great pains to eliminate moisture from every phase of manufacture.

Each compressor is dehydrated by the dry air method in ovens similar to ones shown here on the ¼ H.P. single cylinder air conditioning line. During the cycle, the oven ambient is held to a predetermined temperature and dry air, with the proper dew point, is introduced to each compressor through capillary tubes. Compressors are subjected to a time and heat relationship scientifically determined to give the dryness demanded by Tecumseh.

The refrigeration compressor dehydrated in our plant, when installed in a system, will have a residual moisture of 15 ppm without a dryer or 5 ppm with a dryer.

Close-up view of Loaded Oven.



THIS IS JUST ONE FACTOR BACKING TECUMSEH'S UNRIVALED REPUTATION

... AND SO ARE COMPONENTS—

Tecumseh then goes a step further and makes doubly sure oil and refrigerant used in charging the compressor are dry. Oil is purchased to a moisture content specification of 6 ppm. Upon receipt in our plant it is again processed so the final dry oil used in charging tests 35,000-40,000 volts for five seconds ASTM. The moisture content at this point is infinite and cannot be measured. Similarly, refrigerant as purchased is guaranteed to test less than 25 ppm moisture and will actually test 15 ppm. To guard against one bad drum contaminating a board, all drums are tested for moisture and boards are cleared with dry refrigerant after each opening to the atmosphere.

Tecumseh feels that these precautions are absolutely necessary to protect our customers from moisture problems. Iceing, corrosion of parts and inefficient operation are all caused, at least partially, by moisture. The additional time and trouble to remove as much moisture as possible from the compressor pays off in reduced service calls, fewer end product failures and better overall customer satisfaction. This positive protection is extended to all customers, large and small. Investigate Tecumseh's record for yourself or call your nearest Tecumseh representative.



TECUMSEH PRODUCTS

TECUMSEH, MICH.

Company

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The world's largest producer of Compressors for the refrigeration industry.

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AIR CONDITIONING

Advantages and Disadvantages

High Velocity Air Distribution Systems Save Valuable Space In Multi-Room Bldgs.

SEATTLE—Saving space "is the main reason for using high velocity air distribution systems," an important consideration in large, multi-room buildings, according to F. Honerkamp, chief engineer of Anemostat Corp. of America.

Citing numerous advantages and a few disadvantages, Honerkamp discussed high velocity systems at the 41st semiannual meeting of the American Society of Refrigerating Engineers here.

As advantages, such systems offer, he said:

Reduced cost of utility services; few and small outside air intakes, filters, etc.; small ducts and less duct insulation also reduce amount of cutting, patching, thus cutting installation time and labor cost; they can reduce complex operating and maintenance problems; give flexible zoning; use a minimum of floor space for risers.

On the debit side of ledger, such systems require more fan horsepower, raising both initial and operating costs; greater accuracy is required in calculating duct sizes and arrangements; wider knowledge of fabricating ducts in the field is needed; greater care in installation than is frequently found is essential.

Some of the other highlights of Honerkamp's discussion before the ASRE follow:

The system must be designed (sizing ducts by either the equal friction method or static regain method) for velocities between 2,500 and 4,500 f.p.m. and for a total fan pressure between 4 and 6 in.

High velocity outlets with high induction must be used. Accepted ratio of primary air to total air is 1:1.3 with 100% induction.

A balancing damper or valve is essential for every unit to regulate the air moving from the high side to the low side of the outlet.

Noise originating in the ducts must be reduced in the sound box of the high velocity outlet.

Outlets must be adaptable for single or double ducting and for manual or automatic control.

High velocity systems, according to Honerkamp, offer advantages in both existing and new buildings.

In existing structures the small ducts mean no sacrifice of valuable, income-producing space; they can be installed with virtually no interruption of building usage; they permit central plant systems in structures that might not accommodate conventional systems and thus protect the value of established marketing centers.

For new buildings, the reduced space requirements of high velocity systems could cut the over-all height of the building with consequent lowering of construction costs, etc.

Drive-In Bank In Toledo Has Air-Cooled Booths

TOLEDO—The customers may be hot but the tellers aren't at the new drive-in, walk-up branch here of Ohio Citizens Trust Co.

Willard I. Webb, Jr., president, said the branch is the first in the area to be built solely for drive-in, walk-up purposes. The customer will always be served while outside the building, he pointed out, adding that each burglarproof booth is air conditioned.

144-Room Addition To Hotel John Marshall Will Be Air Conditioned

RICHMOND, Va.—A \$1,000,000 wing will be added to the Hotel John Marshall, making it the largest hotel in Virginia. The 144 room addition will be completely air conditioned and include a new auditorium with a seating capacity of 600 persons in addition to five new meeting rooms.

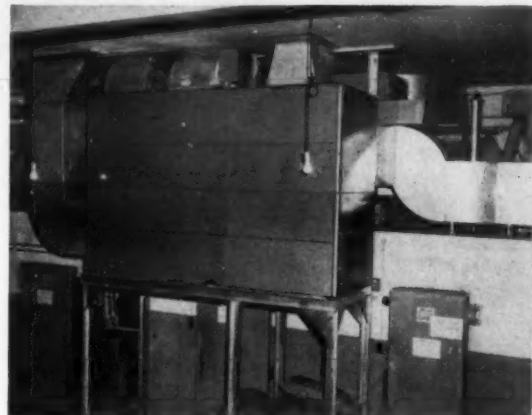
The directors of Richmond Hotels, Inc. decided on the addition because of the increase in travel trade. The local Chamber of Commerce figures show that yearly meetings and conventions have grown from 55 in 1930 to 250 and 80,000 convention visitors are expected this year as compared to 20,000 in 1930.

These will be the first hotel rooms erected in the city since 1929 and will increase the number of rooms in the corporation's four Richmond hotels to 1,195.

Plans for the 15-story addition were drawn by Marcellus Wright & Son, local architects.

Taylor Takes Partner

DALLAS—Bill Taylor, owner of the Day and Night Heating and Air Conditioning Co., 2822 North Fitzhugh, has just announced a full partnership with Carl Russell, who entered the firm Aug. 2.



Space-Saving Supermarket Installation

AIR CONDITIONING has been added to the Loblaw supermarket in Butler, Pa., without loss of valuable floor or storage space by installation of a 20-ton pre-assembled United States Air Conditioning Corp. central station cooling unit on a 7-ft. high platform of 4-in. steel I-beams in the rear stock area. This arrangement permits storage beneath the equipment and free access to the walk-in cooler beyond. The compact UsAirco DRK unit contains in a single casing all of the elements of a cooling plant, including built-in evaporative condenser for water conservation.

Air Conditioned Arts Building Started at Wesleyan

MACON, Ga.—H. G. Tinker, local contractor, has been awarded a \$551,802 contract for the construction of the James Hyde Porter building on the campus of Wesleyan college.

The building, designed by Macon Architect W. Elliott Dunwoody, Jr., will be air conditioned and constructed of brick with a limestone exterior ornament.

The main floor will contain an auditorium with a seating capacity

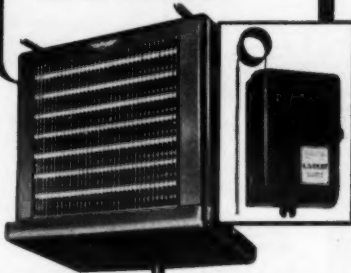
of 1,160, a stage capable of accommodating all types of musical and theatrical productions, and two galleries for the Collier Art Collection, which was presented to Wesleyan by Mrs. E. T. Comer.

The ground floor will consist of music studios and offices. Part of the space will be used for a large studio suitable for small musicals and concerts.

The building is to be completed by September 1955.

LARKIN MEANS LOW OPERATING COSTS

FROST-O-TROL® AUTOMATIC
HOT GAS DEFROSTER



The purchase price of any product is often misleading, for it precludes the cost of long-run operation. All Larkin products are engineered for the lowest possible operating costs, yet they are priced right. That's why Larkin leads the field for long-run, low-cost operation.

Manufacturers of the original Cross-Fin Coil
• Humi-Temp Units • Frost-O-Trol Hot Gas Defroster • Evaporative Condensers • Cooling Towers • Air Conditioning Units and Coils • Direct Expansion Water Coolers • Heat Exchangers • Disseminator Pans.

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AIR CONDITIONING
COMMERCIAL

**For All Your
Refrigeration and
Air Conditioning
Requirements**

Curtis Refrigerating Machine Division
of Curtis Manufacturing Company R-528
1912 Kienlen Ave. St. Louis 20, Mo.
Established 1854

Redmond MICROMOTORS

One of largest stocks
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MOhawk 9-6794

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**REFRIGERATION PARTS and Supplies
plus**

Electric-Motor Parts, Air Conditioning and Heating

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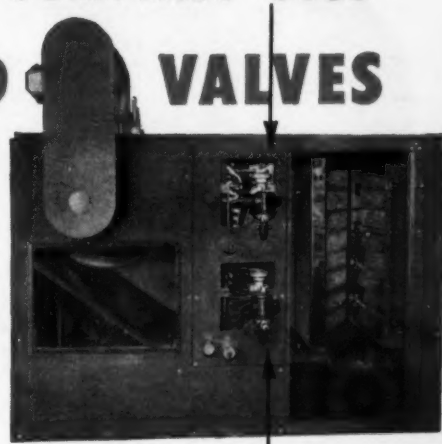
Photo Courtesy The Budd Company

**To help assure continuous passenger comfort
THE TRANE COMPANY uses**



SOLENOID VALVES

**in Air Conditioning
Santa Fe Dome Cars
and Coaches**



One of the toughest of all air conditioning installations is that of railroad passenger cars, and THE TRANE COMPANY selected Jackes-Evans Solenoid Valves for the cars on the famous Santa Fe "El Capitan" and other trains. They are helping to insure satisfactory operation of the improved TRANE air conditioning units.

J-E Solenoid Valves are particularly well suited to mobile equipment for they are not affected by motion, vibration, or angle of installation. This is due to the spring loaded plunger closing the pilot port and the diaphragm spring. In addition, their greater opening power assured the Santa Fe that these valves would open under the most adverse conditions where the condenser coil is located directly over the road bed that becomes excessively hot on the western desert.

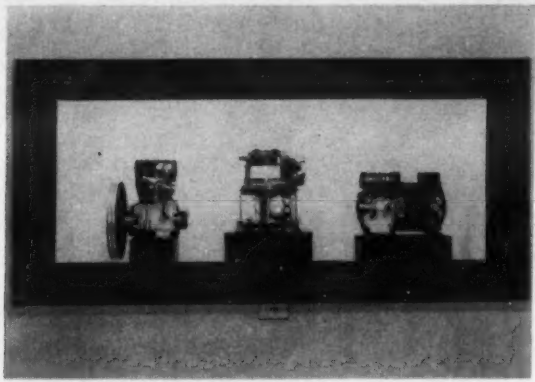
The amazingly simple design of J-E Solenoid Valves—only two moving parts—rugged construction and advanced engineering assure completely dependable performance under the toughest conditions. For complete information on how J-E Solenoid Valves can save you time, money and trouble in controlling Freon, brine, ammonia, steam, water, air and gas, call your wholesaler or write.

All J-E Solenoid Valves are
unconditionally guaranteed
for 18 months

- TIGHT SEATING—no bubble tolerance.
- SIMPLICITY—only two moving parts.
- LONG LIFE—cool coils.
- DURABILITY—all corrosion-resistant material.
- OPENING PRESSURE DIFFERENTIAL—higher than most others on the market.



**SOLENOID VALVES THAT SURPASS THEIR SPECIFICATIONS
JACKES-EVANS MANUFACTURING COMPANY**
Controls Division: 4427 Geraldine Avenue • St. Louis 15, Missouri



DISPLAY that attracted visitors to the Copeland booth at the All-Industry Show still attracts favorable comment to visitors in the reception room at the firm's home office. This type of display using cutaways can be adapted to a variety of products.

Show Exhibit Becomes Permanent Display

Cutaways Show Basic Types of Copeland Equipment to Home Office Visitors

SIDNEY, Ohio—Copeland Refrigeration Corp. here turned a sales convention exhibit into a novel display in the firm's home office reception room.

Picture-framed in a wall recess, the units are cutaway models of the three basic types of commercial refrigeration equipment manufactured by Copeland. Hidden lights highlight the cutaways.

On the left is a Copeland model 19, 1-hp., refrigeration compressor for belt-driven units, air or water cooled.

Center is the new welded her-

metic motor-compressor, 3/4 hp., for air or water-cooled units.

At right is the "Copelametic," the accessible hermetic motor-compressor pioneered by Copeland. This model is the 1/2 hp., for air or water-cooled units.

These units were the center of attraction in Copeland's exhibit at last year's Air Conditioning & Refrigeration Exposition in Cleveland. Because so many convention visitors commented on the cutaways, Copeland decided to install them permanently in their reception room.

'Welcome Letter' to New Families Helps Keep Service Firm Busy

DENVER, Colo.—The refrigeration service firm will be wise to look into the market represented by new families moving to the community, according to Gregory "Mike" Elna, head of Refrigeration Service Co. here.

Elna, an authorized repair agency for three top domestic refrigerator lines, has boosted his volume directly in proportion to population increases in the Denver area. This has been accomplished, not by waiting for the customer to call in, but instead, a novel "greeting" sent to each new family in the community.

Elna subscribes to a Denver business journal which lists every new family moving into Denver. Inasmuch as the trading area has grown from 350,000 to 600,000 in the last 10 years, this amounts to a substantial list of names. To each, Elna sends a varityped letter, extending Refrigeration Service Co.'s welcome to the community, and promising rapid, fairly-priced repairs on all family appliances.

In the closing paragraph, Elna calls attention to a sticker attached to the letter with a paper clip, with the suggestion that the housewife place the sticker on the back of the refrigerator, on the door, etc., as a handy reference whenever the refrigerator gives trouble.

The sticker, simply printed on a glossy finish, white cardboard background, attaches to the refrigerator permanently with a "miracle adhesive" which insures that it will remain permanently in place.

Keeping records on this unusual form of direct mail and the results achieved, Elna believes that he gets the all-important "first call" when any out-of-warranty refrigerator is involved. The first call, of course, leads to "repeat business," and consequently, Elna sees to it that his mechanics extend maximum courtesy and efficiency on the initial repair service call.

Superior Valve Appoints Myers Representative

PITTSBURGH—William P. Myers, Jr. of St. Louis has been named local sales representative of Superior Valve & Fittings Co.

Myers will represent Superior in Missouri, Kansas, southern Illinois, and parts of Kentucky and Tennessee.

He will handle the Superior refrigeration line in addition to related products of other manufacturers which are now represented by his sales firm.

Before entering the manufacturers' representative field, Myers was affiliated with the Brown Instrument Div. of Minneapolis-Honeywell, Alco Valve Co., and from 1950 to December, 1953, he was sales manager of the Controls Div. of Jackes-Evans Mfg. Co., St. Louis.

Service & Supplies

Penn 'Controlorama' Hits Southern Circuit Sept. 27

GOSHEN, Ind.—"Controlorama," an all-new Penn educational show designed as a service to air conditioning, heating, and refrigeration engineers and servicemen, will tour eight southeastern and southern states this Fall, making its inaugural appearance at Huntington, W. Va., on Sept. 27.

This was announced by R. H. Luscombe, general sales manager of Penn Controls, Inc.

"Controlorama" is a completely redesigned and enlarged version of the annual Penn educational shows which presents the application, installation, and servicing of automatic controls.

Included in the new equipment, which travels in a custom-built truck, are demonstrator operating systems for residential air conditioning, heating, and refrigeration, colored slides, animated charts, and giant operating controls.

This year the program format calls for a combination heating-cooling show to start at 5:30 p.m. to enable servicemen to attend immediately after working hours without the necessity of going home, eating, changing clothes, and returning downtown for a full evening meeting.

The new starting time also makes it possible to include an hour-and-a-half service session and question-answer period. This is a feature requested by servicemen at past shows.

Luscombe emphasized that trade people should come as they are right after work since a free buffet dinner and refreshments would be served at the show.

"Controlorama" is scheduled in 23 cities and is being sponsored by local wholesalers in each city.

The "Controlorama" schedule is as follows: Huntington, W. Va., Sept. 27; Charleston, W. Va., Sept. 28; Roanoke, Va., Sept. 29; Washington, D. C., Oct. 1; Richmond, Va., Oct. 4; Norfolk, Va., Oct. 6; Raleigh, N. C., Oct. 8; Greensboro, N. C., Oct. 11; Charlotte, N. C., Oct. 13; Columbia, S. C., Oct. 15; Charleston, S. C., Oct. 18; Savannah, Ga., Oct. 20; Jacksonville, Fla., Oct. 22; Orlando, Fla., Oct. 25; Miami, Fla., Oct. 27; Tampa, Fla., Oct. 29; Baton Rouge, La., Nov. 1; Beaumont, Texas, Nov. 3; Houston, Texas, Nov. 4; Corpus Christi, Texas, Nov. 8; San Antonio, Texas, Nov. 10; Austin, Texas, Nov. 12; South Bend, Ind., Nov. 18.

Crack Down

TOLEDO—Police arrested William J. Hart, 56, on the charge of leaving an unattended refrigerator, accessible to children, in the hallway of 109 Euclid Ave.

Mueller Brass Acquires Sheet Aluminum Corp.

PORT HURON, Mich.—Acquisition of the entire capital stock of the Sheet Aluminum Corp. of Jackson, Mich., by the Mueller Brass Co. was announced recently by F. L. Riggan, Sr., president of Mueller.

Sheet Aluminum was purchased for an undisclosed sum from the estate of the late George M. Carter and other shareholders.

Riggan stated that the acquisition of Sheet Aluminum marks "another step in Mueller's expansion and diversification program." In 1951, Mueller Brass acquired the Valley Metal Products Co.

Sheet Aluminum, which was incorporated in 1925, will be operated as a wholly-owned subsidiary.

SUPER-FLO FILTER-DRIER

UP TO 5 TONS
NO PRESSURE DROP

MOLDED REMCAL DRYING FIBERGLAS DEPTH FILTERING
Check Super-Flo's amazing low price, for both original equipment and replacement, against ordinary driers which do not have Super-Flo molded drying elements, massive fiberglass depth filters and spun-end copper shells. Available to the trade through wholesalers everywhere.

REMCO INCORPORATED
ZELIENOPLE, PA.

Did you know you could get COLD PLATES like this?

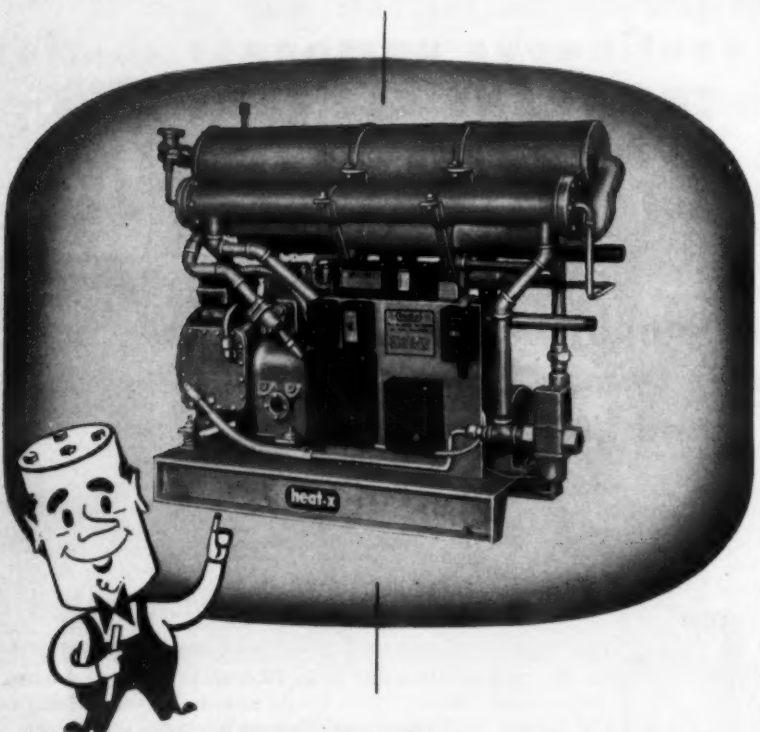
MANY SHAPES
MANY SIZES
MANY METALS

"JOB TAILORED" Dean Cold Plates are the answer to tough refrigeration problems. You can get Cylinders, U's, Angles, Tanks, etc., made exactly in the size you need.

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PRODUCTS, INC.

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THE NEWEST MEMBER OF THE EXPANDING heat-x LINE .. 'PC' PACKAGE CHILLERS



"PC" Package Chillers, latest addition to the Heat-X line, are entirely self-contained . . . delivered completely wired and charged with Freon-12 . . . ready for plug-in operation.

All refrigerant passages are of INNER-FIN construction . . . a patented Heat-X exclusive . . . permitting compactness of design, efficiency of operation impossible with old style construction of other chillers.

These reliable, economical Heat-X Package Chillers, available in 2 HP. through 15 HP. models, are ideal for chilled water air conditioning systems, drinking water or beverage cooling applications, industrial water cooling uses.

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RANCO DUAL PRESSURE CONTROL

... safety-guarantee for your air conditioning service

Your customers will appreciate the protection of this Dual Pressure Control . . . and here's why:

High pressure cut-out with non-adjustable high pressure limit stop safeguards the system—prevents service adjustment above the maximum safe operating pressure. Low pressure safety cut-out prevents pulling air into the system with excessive low pressure operation.

In either event, the system shuts down until restarted with the manual reset. Both high and low pressure ranges are independently adjustable.

Add up those features and you'll understand why Underwriters Laboratories requires this type of control on all hermetically sealed air conditioning systems . . . why both you and your customers will consider it well worth the few minutes it takes to install. Make your next job a Ranco Dual Pressure Control installation . . . now available in Types 012-1553, 012-1594 and 012-1595 . . . a safety-guarantee for your air conditioning customers.

Ranco Inc.

COLUMBUS 1, OHIO



WORLD'S LARGEST MANUFACTURER OF REFRIGERATION CONTROLS

Admiral 6-Mos. Sales, Profits below '53 Level

CHICAGO—Sales of \$105,201,498 and earnings after taxes of \$2,558,850 in the first six months were announced recently by John B. Huarisa, executive vice president of Admiral Corp.

Net earnings per share were \$1.09 on 2,358,276 shares outstanding. Profit before taxes and other reserves was \$6,054,633.

Sales and earnings in the first half of 1953 were \$131,222,438 and \$4,762,152, while earnings were \$2.02 per share. Pretax earnings were \$10,137,649.

Sales during the second half should equal last year, the Admiral official said, while earnings during the same period should equal or exceed 1953.

Second-quarter sales were \$49,223,936, compared with \$62,030,589 in 1953, while net earnings in the quarter were \$1,054,806, compared with \$1,705,274 last year.

Earnings per share were 45 cents, while 72 cents were earned in 1953. Profit before taxes and other reserves was \$2,178,482 compared with \$3,508,085 last year.

Laurence Heads Servel Sales In St. Louis Area

EVANSVILLE, Ind.—Vern C. Laurence of Berwyn, Ill. has been appointed district sales manager for the St. Louis area by Servel, Inc., according to Neal E. Schuman, field sales manager of the company's appliance division.



V. C. Laurence

Laurence has been a dealer sales representative for the Servel factory-owned distributing branch in Chicago for the past six years.

In his new job Laurence will assist Servel distributors in St. Louis; Des Moines, Iowa; Springfield, Ill.; and Peoria, Ill., in the promotion and sale of refrigerators, food freezers, room air conditioners, water heaters, and portable refrigerettes. He will make his headquarters in St. Louis.

Laurence attended schools in LaGrange, Ill., and Loyola university.

Nealy Joins Barnes as Chief Engineer of Div.

MANSFIELD, Ohio—Millard H. Pryor, president of Barnes Mfg. Co. here, has announced the appointment of M. Alan Nealy as chief engineer of the company's Pump & Water System Div.

Nealy comes to Barnes from Peerless Pump Div. of Food Machinery & Chemical Co. where he headed product engineering for the past 18 years.

Ed Wolfert Promoted To Seeger Vice Pres.

ST. PAUL—John Holl, president of the Seeger Refrigerator Co., has announced the promotion of Edward R. Wolfert to vice president.



E. R. Wolfert

Wolfert has, since 1949, been manager of engineering in the company's Evansville division, in which capacity he has been responsible for the development and design of refrigerators, freezers, dehumidifiers, and refrigeration components.

Previous to his joining the Seeger organization, Wolfert had, since 1923, been associated with Westinghouse Electric Corp. From 1942 to 1949, he was manager of the Westinghouse electric appliance engineering department with direct responsibility over the design of the company's home appliances.

Wolfert is an outstanding authority in the electrical engineering field. He is a recipient of the Westinghouse Order of Merit, as well as the Modern Pioneer award which was granted to 500 outstanding inventors.

Clyde Plant To Boost Whirlpool Production

ST. JOSEPH, Mich.—Whirlpool Corp. will begin production of automatic washing machines at its Clyde, Ohio plant about Oct. 1, supplementing similar existing production at St. Joseph, it was announced recently by President Elisha Gray II.

The new schedule, necessitated by increased sales of both automatic washers and dryers, also calls for expanded production of automatic gas and electric dryers at St. Joseph, the company said.

Present dryer production is already at the highest level since inception of the first dryer line in 1949, according to Whirlpool.

Simultaneously, production of automatic washer gear cases and other component parts for shipment to Clyde will begin at the St. Joseph plant. Since removal of the wringer washer and automatic ironer lines to Clyde last year, production at St. Joseph has been devoted exclusively to automatic washers and dryers.

The new Clyde production line has been established in a building purchased early this year from Bendix Appliance Div. of Avco Mfg. Corp., and occupied since June 1 by Whirlpool. Current production of wringer washers and automatic ironers will continue at Clyde.

Alvin Baer Dies at 75; Was ASRE President

LEMOYNE, Pa.—Alvin H. Baer, a well-known figure in the refrigerating industry for half a century, died Aug. 11 at the Point Pleasant (N. J.) hospital. He had been vacationing at nearby Manasquan with his daughter, Mrs. C. P. Conrad, with whom he lived here. He was 75 years of age.

Baer was a past president of the American Society of Refrigerating Engineers.

Baer was born in Cumberland County, Pa., and when 21 moved to Waynesboro, where he was employed by Frick Co. For a decade and a half, ending in 1932, he was sales manager of the Refrigeration Div. of the firm.

Later he served as vice president of the Carbondale Machine Co. and of the Worthington Pump & Machinery Corp. During World War II he worked for three years with the War Production Board. For some time he was stationed in Ottawa, Can.

To German Who Finds 80° F. Too Hot, U.S. Is Fine Place To Sell Refrigeration

DETROIT—"This heat — it's good for business, yes?"

That is one of the main impressions that the United States has left on Wolf-Dieter Metzner, young sales representative of Metzner & Jung, West German refrigeration controls manufacturer.

Dieter has traveled the length and breadth of this country over the past three months studying American business methods and particularly visiting American refrigeration controls plants. He returned to his home city of Wuppertal in the Ruhr on Aug. 21.

Sizzling 100° F. temperatures in St. Louis, stifling humidity in New Orleans and Chicago, and highs in the 80's and 90's in Los Angeles, Seattle, Detroit, New York, Minneapolis, Washington, D. C., and Florida were something new to Dieter—and as a rising young businessman, they meant only one thing—what a wonderful place to sell refrigeration.

Though the firm he represents is one of the largest of its type in Germany and is a pioneer in the field, Dieter commented that it does not have the climate to work in that the United States provides.

"When the temperature gets to be 77° F. at 9 a.m. in Germany," he declared, "is it considered too hot to keep children in school. They let school out on those days.

In my whole schooling (he is a graduate engineer with the equivalent of a master's degree) I can remember only 30 days when school was let out because of the heat."

While greatly impressed with the progress of the refrigeration industry here, Dieter reported that the German refrigeration industry has also made great strides since the war.

Business is growing very competitive there and manufacturers who expect to survive are bending every effort to modernize their plants and increase efficiency.

He pointed out that Metzner (his father) & Jung has just recently built a new plant on the outskirts of Wuppertal with most of the manufacturing facilities on one floor. It has been outfitted with all new machine tools.

To keep their plants as up to date as possible, he related, manufacturers try to replace their tools before they are five years old.

To further increase efficiency, his firm is planning to construct a five-story administration building right next to the new plant, where most operations will be centralized.

Dieter considered that the progress of the refrigeration industry in Germany to be about on a par with that in this country. Mostly conventional units are used, he

noted, as there is only one manufacturer of hermetic units in Germany, whose output is chiefly for domestic refrigerators.

A salesman himself, Dieter says he puts 50,000 miles a year on his Opel automobile out calling on original equipment manufacturers and parts jobbers.

One of the high spots of Dieter's trip here was the ASRE convention in Seattle, where he had a chance to fraternize with fellow engineers. The "gemuetlichkeit" of the Americans made him feel right at home, he said.

"They are just like the German refrigeration men. Just one big happy family, yes?"

Norge Names Bell Co. Allentown Distributor

CHICAGO—Norge Div. of the Borg-Warner Corp. recently announced the appointment of Charles L. Bell Co. as its distributor in the Allentown, Pa. area.

The Bell Co., located at 14th and Gordon Sts. in Allentown, will serve dealers in Pennsylvania's Berks, Carbon, Lehigh, Monroe, and Northampton counties.

Charles L. Bell, president, explained that his firm has increased its sales volume steadily each year since it was established in 1944.

Other officers of Charles L. Bell Co. are Raymond D. Butz, sales and advertising manager; Richard Bortz, credit manager; Robert Mackes, service manager; and Robert Wilt, parts manager.

Are YOU too far down the routing list?

CHECK TO:

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- 2 MBO ✓
- 3 LER ✓
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- 6 EAP

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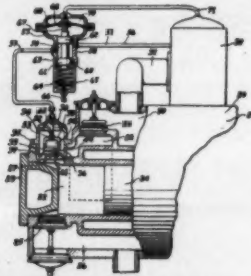
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from everywhere
to enjoy the
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Convenience of the
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BROADWAY at 55th STREET
Ideal accommodations
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Private baths, showers
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FROM \$3.50 \$5.00
SINGLE DOUBLE

PATENTS

Week of April 13
(Continued)

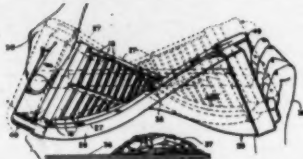
2,675,172. UNLOADER FOR COMPRESSORS. James H. Anderson, Easton, Pa., assignor to Ingersoll-Rand Co., New York, N. Y., a corporation of New Jersey. Application March 22, 1946, Serial No. 656,318. 1 Claim. (Cl. 230-27.)



In an unloader for a compressor, a casing having a compression chamber, a piston therein, a receiver for the fluid compressed by the piston, a discharge valve for controlling communication between the compression chamber and the receiver, a clearance chamber, a clearance control valve means to control communication between the compression chamber and the clearance chamber comprising a cage having a pressure chamber and opposed seating surfaces, a valve in the cage to cooperate with one seating surface for controlling communication between the compression and clearance chambers and to cooperate with the other seating surface for controlling communication between the pressure chamber and the clearance chamber, the third said valve being constantly subjected to the pressure prevailing in the compression chamber for moving the third said valve away from said one seating surface to establish communication between the compression

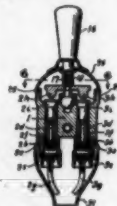
and clearance chambers, means for supplying pressure fluid from the receiver to the pressure chamber for returning the third said valve to said one seating surface, and means acting responsively to pressure in the receiver for controlling the pressure valve of the fluid in the pressure chamber.

2,674,962. TRAY MEANS FOR THE PRODUCTION OF FRANGIBLE, CHIP-FRAGILE, AND FLAKEABLE ARTIFICIAL ICE ELEMENTS. Joseph G. Nigro, Chicago, Ill. Application Feb. 21, 1952, Serial No. 272,571. 7 Claims. (Cl. 62-108.5.)



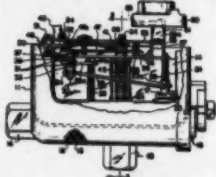
1. Tray means for producing ice chips, flakes and crystals, comprising a tray element of flexible material provided with manipulating handle portions at each end thereof, the said tray element having a liquid retaining compartment subdivided by partition means into a multiplicity of comparatively narrow liquid congealing compartments of wafer-like narrowness, capable of producing congealed wafers of such thinness so that the said tray means subsequent to congealing of liquid therein when subjected to torsional strains and stresses by torsional movements about its geometric locus cause the congealed ice chips, flakes and crystals of relatively small and irregular configuration readily miscible with liquids, the said tray element being provided with a median web portion extending beyond the top surface thereof, and a few of said partition means evenly distributed extending into the same geometric plane of the top portion of the said median web portion to permit superimposition of like tray means preventing adhesion thereof.

2,675,018. MULTIPLE MIXING FAUCET. James L. Hudson, Detroit, and Philip P. Bender, Ferndale, Mich., assignors to Kenneth Hudson Foundation Inc., Detroit, Mich., a corporation of Michigan. Application Oct. 14, 1947, Serial No. 779,712. 6 Claims. (Cl. 137-381.)



1. In a mixing and dispensing faucet the combination of a body, a plurality of conduits leading into the body and including in each conduit a valve casing and a spring closed valve, a nozzle cover at the lower end of said body into which the several conduits discharge, but with streams removed from, means by which one valve may be opened or selections of a plurality of the valves separately opened for mixing the flow from the conduits, the said means comprising a handle and lever supported upon a ball and socket which may be tilted in one of several directions and actuating connections between the handle and the valves to select the desired valve or two valves for coincidental opening, and a cap fitting over the top of the body and having a triangular opening therein to act as a guide for the lever to the two positions for opening simultaneously two valves.

2,675,019. LIQUID LEVEL CONTROL. Paul F. Shivers, Edina, Minn., assignor to Minneapolis-Honeywell Regulator Co., Minneapolis, Minn., a corporation of Delaware. Application May 19, 1953, Serial No. 288,586. 10 Claims. (Cl. 137-386.)



9. A liquid level control device comprising a chamber having an inlet valve for controlling liquid flow to said chamber, a bimetallic member connected to said valve at one end of said member, said member being positioned at the nor-

U.S. Government Contracts Procurement Information

PROCUREMENT INFORMATION

The following is a list of proposed procurements issued by the various indicated U. S. Government procurement offices. This list is compiled and made available daily on a free pick-up basis. Prospective bidders may obtain complete bid sets by a request to the purchasing office under which the purchase is listed in this Synopsis. Be sure to identify completely the bid invitation you wish by including in your request the item description, the invitation number or reference number and the opening date.

It is not necessary to refer solely to the issuing office for additional data on a bid invitation issued by any of the following U. S. Army Ordnance Offices: Ordnance Tank Automotive Center; Detroit Arsenal; Frankford Arsenal; Picatinny Arsenal; Raritan Arsenal; Ordnance Ammunition Center, Joliet, Ill.; Rock Island Arsenal; Springfield Armory; Watertown Arsenal; and Watervliet Arsenal. Complete information on any purchase listed by any of those offices alone can be obtained from the Ordnance District Office nearest you. Its address is on file in your nearest Department of Commerce Field Office. Do not ask an Ordnance District Office for information on a purchase unless it is listed by one of the above-named offices.

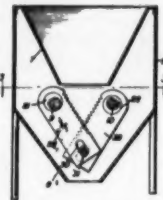
Invitations for Bids numbers will be followed by the letter "B." Requests for proposals or quotations will be indicated in this column by the letter "Q," or, if numbered, the number will be followed by the letter "Q."

DEPARTMENT OF DEFENSE

Description	Quantity	Invitation No.	Opening Date
Bureau of Ships, Washington, D. C.			
Generator set diesel engine	18	560-519-653Q	10 Sep 54
heat exchanger cooling 5KW single phase 120 volt 60 cy.			
0.8 power factor dripproof enclosure AC generator per spec mil			

mal liquid level in said chamber with the other end thereof being fixedly supported, said member being positioned to have varying surface contact with said liquid as the liquid level thereof varies and means for conducting electric current to said member at a constant rate so that electric current passing through said member operates to open said valve when the liquid level is such as to cause the member to heat up and to close when the liquid level is such as to dissipate the heat in said member.

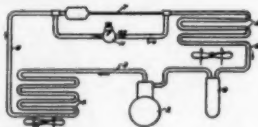
2,675,181. ICE CRUSHER. John D. Tebow, Alameda, Calif. Application Aug. 31, 1949, Serial No. 113,360. 2 Claims. (Cl. 241-266.)



1. An ice crusher comprising a hopper, a pair of driven shafts, journaled in the hopper in spaced parallel relation to each other, groups of crusher blades spaced along the shafts and connected at one end to the shafts for reciprocating movement of the blades in group endwise, and a rod supported in the hopper below the shafts and in parallelism therewith and holding the groups of blades in V-shaped slidably connected relation with the blades of each group crossing the blades of the other group, and eccentrics on said pair of shafts reciprocating said groups of blades oppositely in each group relative to those in the other group.

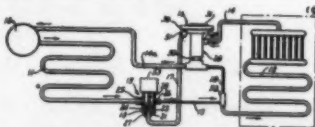
Week of April 20

2,675,683. CONTROL MEANS FOR REFRIGERATION SYSTEMS. William L. McGrath and Richard H. Swart, Syracuse, N. Y., assignors to Carrier Corp., Syracuse, N. Y., a corporation of Delaware. Application June 22, 1950, Serial No. 169,632. 6 Claims. (Cl. 62-3.)



1. In a refrigeration system, the combination of a compressor, a condenser, a capillary tube, an evaporator and an accumulator disposed in such order in a refrigerant circuit, and a normally closed pressure responsive valve in the circuit responsive to a predetermined change in pressure corresponding to a predetermined change in evaporator temperature to move toward an open position permitting liquid refrigerant to bypass about at least a portion of the capillary tube.

2,675,684. REFRIGERATING APPARATUS. Malcolm G. Shoemaker, Doylestown, Pa., assignor to Philco Corp., Philadelphia, Pa., a corporation of Pennsylvania. Application Aug. 17, 1951, Serial No. 242,290. 6 Claims. (Cl. 62-8.)



1. Means operable to control the flow of refrigerant through the evaporator of a refrigeration system of the type having a compressor, condenser and a restrictor in series flow circuit with the evaporator, comprising a valve body having two intercommunicating chambers one of which is adapted for connection with the outlet of the evaporator and the other of which is adapted for connection with the inlet of the compressor, a pressure operated diaphragm enclosed in said valve body, a valve member carried by said diaphragm and operable to establish and to prevent communication between said chambers, passage means establishing communication between one side of said diaphragm and that one chamber which is adapted for connection with the outlet of the evaporator, other passage means establishing communication between the other side of the diaphragm and said one chamber, and selectively controllable conduit means communicating with said one chamber and adapted for connection with the condenser to establish communication between the latter and said one chamber.

G180 60 dated 10 June 1954. Note: heat exchangers shall be of the type on the Navy qualified product list.

General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pennsylvania
Tubing seamless copper 1575 ci 155-203-55B 17 Sep 54
type K plumbing and heating and refrigeration soft annealed deoxidized and dehydrated 99 point 9 percent pure copper fed spec WW T 799A amend 1.

Officer in Charge, Navy Purchasing Office, Washington, D. C.
Blower ventilating, 40 IFB-600- 22 Sep 54
light weight, 158-55
Cream making equipment 15 IFB-600- 16 Sep 54
5 gal. capacity with 80 gal. hardening cabinet with 440 V 3 PH AC Dripproof motors and starters, per interim spec MIL-R-17071A dated 23 March 1952.
Ice Cream equipment 15 IFB-600- 16 Sep 54
same as above except with 230 V DC motors and starters, 238-55S

U. S. ATOMIC ENERGY COMMISSION

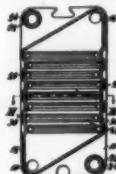
United States Atomic Energy Commission, Savannah River Operations Office, Post Office Box A, Augusta, Georgia
Trichlorethylene 101,400 lbs. 26-55-D-62608 31 Aug 54

CONTRACTS AWARDED THROUGH AUG. 24

Bureau of Ships, Washington, D. C.
Non-Magnetic refrigerating condensing unit, 3/4-ton capacity Air cooled 115 volts, D.C.—26, \$100,183.—Carrier Corp., New York, New York.

put pressure in said output chamber dependent on the pressure in all of said chambers, and means for maintaining in each of said third and fourth chambers a pressure in predetermined relation to said output pressure which is varied on a change in said output pressure and differs in a predetermined manner from said output pressure on a change in the latter.

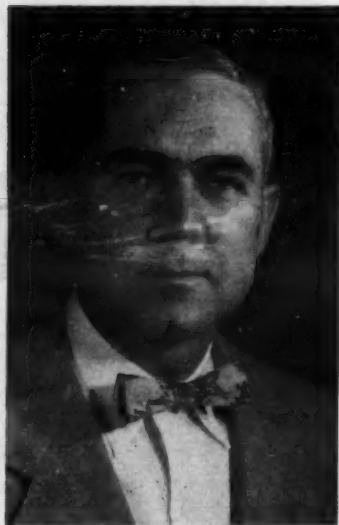
2,676,000. PLATE TYPE HEAT EXCHANGER. Nils Richard Gosta Ekwall, Nykoping, Sweden. Application March 21, 1950, Serial No. 150,855. Claims priority, application Sweden, March 28, 1949. 8 Claims. (Cl. 257-245.)



1. A plate type heat exchanger comprising a plurality of heat exchange plates, means between each two adjacent plates defining the perimeter of a space therebetween for flow of fluid, means providing inlets and outlets for each of said spaces, projections extending transversely across said plates between said inlets and said outlets to provide spaces of sinuous form in a plane normal to the planes of the plates, said projections terminating short of the perimeters of said spaces and the means defining the portions of the perimeters adjacent to the ends of the projections being shaped to provide passages between the ends of said projections and said means of sinuous form in the planes of the plates.

(To Be Continued)

NEW BUSINESS— NEW SUBSCRIPTION



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Mr. F. M. MacDougall, now operating his own engineering business in Kirkwood, Missouri says:

"In starting my own engineering business, one of the first things I did was to enter a subscription to AIR CONDITIONING & REFRIGERATION NEWS (my former employer provided each man with a personal subscription).

"The NEWS is indeed the 'conscience of the industry,' sympathetically chiding our shortcomings and encouraging our sound progress and planning. Without presuming to speak for us, its accuracy and clarity often make us feel that the words have been taken from our mouths."

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8-30-54

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EXPERIENCED AND efficient commercial, household and air-conditioning serviceman with eight years' experience on all types of sulphur, methyl and Freon systems, desires year-round work with guaranteed salary or hours. 31 years old, married. Presently employed near Chicago. Will consider attractive offer anywhere. BOX A5031, Air Conditioning & Refrigeration News.

EXPERT SERVICE mechanic on commercial and low temperature. Well schooled in factory representation having last 6 years with freezer factories. Also broad experience as foreman. Age 41, married. Will go anywhere or represent on west coast. Available September 1st. Write BOX A5032, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

CHIEF ENGINEER—Experienced heating contractor in Cleveland is expanding air conditioning and refrigeration departments and needs competent engineer to take full responsibility for planning, purchasing and construction. Engineering college graduate between 30 and 35 years with 5 years' experience required. Opportunity offers salary plus bonus plus opportunity to take ownership interest. Our employees know of this ad. All replies kept confidential. In answering please give sufficient information to indicate qualifications and we will arrange personal interview. BOX A5025, Air Conditioning & Refrigeration News.

SALES ENGINEER experienced in air cooling and heating with ability figure loads, make layouts and estimates. Excellent opportunity for right man, Carrier dealer, Florida location. References. Reply to BOX A5028, Air Conditioning & Refrigeration News.

AIR CONDITIONING sales-engineer. High caliber go-getter with top level trade contacts and with product and field experience wanted by manufacturer of room, residential and store air conditioners. Send detailed resume on confidential basis giving background and accomplishments. Our employees know of this ad.

vertisement. BOX A5029, Air Conditioning & Refrigeration News.

SALES ENGINEER for large supplier of heat transfer equipment to the household refrigeration and home freezer market. Organization is a multi-plant firm with other products. Prefer man with refrigeration or air conditioning experience. Earnings commensurate with ability and experience. Chicago area location. Convenient interviews can be arranged. Include complete resume of education and experience. BOX A5030, Air Conditioning & Refrigeration News.

MFR. REPRESENTATIVES needed for fast selling nationally advertised canvas air-conditioner protector. Several territories open, especially in East and West Coast states. Contact: TULSA CANVAS PRODUCTS, P.O. Box 2072, Tulsa, Oklahoma.

EQUIPMENT FOR SALE

COIN METERS: International Register Model M-12 coin operated meters, completely reconditioned and guaranteed. Excellent for time payment or rental applications. \$25.00 each. FOB, Hackensack. ALLEN-HARRIS ASSOCIATES, 333 Hudson Street, Hackensack, New Jersey.

29—SERVEL gas refrigerating units only, four to eight cubic foot capacity, various types of Model R4000 reconditioned and in first class working order. Priced to sell promptly. For further details contact the GAS & ELECTRIC CO., Purchasing Dept., Baltimore 3, Maryland.

SAVE MONEY, save time, get your special trade discount and free delivery on the compact condensate water disposal unit for air conditioners, ice bins, drinking fountains. Only 9" high, 11" wide and 4 1/2" thick; complete with check valve, float switch and tank. Will pump to 12 foot head. List \$50.00. Higher heads in stock. Order from your jobber. Guaranteed by KESCO PRODUCTS, P.O. Box 94, Springfield Gardens 13, New York. Established 1944.

FOR SALE: Brand New Popular Brand Supermatic -Hermetic Domes- 1/2 H.P. \$40.00—3/4 H.P. \$42.50—1 H.P. \$45.00. Complete with relay and capacitors. Model R 5 and 7 1/2 H.P. Compressors \$115.00. Details supplied on request. Send for refrigeration parts and supplies catalog listing many other sensational values. WALTER W. STARR REFRIGERATION, 2833 Lincoln Ave. Chicago 12, Illinois.

COLLECTION METERS for sale—new and used. Available in quantity at greatly reduced prices. BOX A5027, Air Conditioning & Refrigeration News.

Refrigeration Problems

and their solution

by Paul Reed

For Service and Installation Engineers



Paul Reed

A New Compressor Is Born

Making a refrigerating compressor is a much more complicated matter than most people realize. It involves many men, many skills, and many types of machinery.

In its early stages of design and development, a great deal of time is required. A new design of compressor, essentially different from its manufacturer's previous product, will probably be two to five years in its design, development, and experimental stages before any attempt is made to put it into production.

THE NEW COMPRESSOR IS CONCEIVED

It may be in the design stage for months. This is the "paperwork" period. Ideas evolve into rough pencil sketches; pages of note paper are covered with figures. Many of the ideas that sounded good fail to stand up under calculations. Most of the paperwork in this stage winds up in the wastebasket.

Finally a design begins to "jell" and a preliminary assembly drawing is made and some of the parts are detailed. Patent files are searched, partly to see if the new design is patentable and partly to see if it infringes on someone else's patent. As yet not a wheel has turned; not a part has been made.

The next step is to make up enough parts for one or two compressors. These are usually made in the tool room or in a small model shop. The machinery used is not production type equipment. These model parts are made on a lathe, a drill-press, a milling machine, and perhaps a power saw and a planer.

There is a lot of handwork: filing, scraping, lapping, and probably some welding. The parts are handfitted and assembled. Even for one or two compressors, temporary wood patterns have been necessary for making the castings. The castings and most of the parts have had to be heat-treated.

By the time the compressor is ready to run, it is a very expensive compressor. Just the cost of making the parts and assembling them, not counting the preliminary design and paperwork, for even a small 1/4 or 1/2-hp. compressor, has run into hundreds, perhaps thousands, of dollars.

THE EXPERIMENTAL STAGE

The compressor then goes into the experimental laboratory where it is put through its paces under conditions that simulate actual usage in the field. It is tested for capacity, efficiency, and wattage. Thermocouples are attached to it and the temperatures are read for different spots on the compressor.

It is given "torture tests" to determine its ability to "take it." It is torn down and examined for wear. Details are changed, and slightly or widely different parts are incorporated in it and the revised design is again "given the works." Different oils are tried in it, and examined and tested in the chemical laboratory to see how they stand up.

After the design has been about arrived at, a small quantity of the compressors are built, still pretty much by hand and at high cost. These are put on further tests in the laboratory and usually, in co-operation with the service department, installed at selected spots

in the field where they can be watched and records kept of their performances.

ALL DEPARTMENTS GET INTO THE ACT

Along about this time other departments are called in to see the new design in operation, so that they can suggest changes in line with their particular viewpoints.

The sales department may criticize its appearance or dimensions as well as its capacity, efficiency, and mechanical features in comparison with competitive compressors. In fact, directly or indirectly, the sales department may have been originally responsible for starting the design and development of the new model of compressor.

Most certainly the service department will have been following the new model of compressor during its experimental testing. Not only will they be able to suggest features that will make the compressor more easily serviced, but they can frequently suggest worthwhile features that add to the compressor's dependability and longevity.

Not infrequently the service department is able to point out objectionable features that field experience has proven to be unreliable or unpopular. As a rule, the service department is closer to the customer and can report his reactions better than any other department—including even the sales department.

The production department can frequently suggest changes that will make the compressor easier and less costly to manufacture, and more adaptable to the production machinery and processes available in the plant.

The tool design and process departments should be consulted, for they can suggest changes that will simplify production tooling, reduce tooling costs, or increase production.

And of great importance, and something that must be done before the compressor is ready to go into production, the cost department must make a careful estimate of the cost of building this compressor in the quantities in which it is expected to be produced.

THE COMPRESSOR IS RELEASED FOR PRODUCTION

Finally, after the compressor has been given general approval, it is up to management to order the compressor put into production. Then almost every department in the organization must get busy to make, sell, and service the compressor in quantity. The engineering department releases complete assembly and detail drawings and bills of materials to all departments. Specifications must be issued for all the materials. Test and inspection procedures must be written and issued.

New patterns, tools, jigs, dies, and fixtures are designed and made or purchased. New machines may have to be bought or old ones revamped. Various processes and routings are specified. Test equipment must be designed and built. Production and assembly lines may have to be changed and machines and conveyors moved.

Orders must be placed for the materials required to build thousands of the new compressors, and procedures set up to purchase additional material so as to maintain a pre-determined minimum and maximum inventory. Record files throughout the entire plant

must be changed to include the new compressor.

SERVICE ACTIVITY BEFORE SERVICE IS NECESSARY

The service department must estimate the replacement compressors and parts to be included in the production run so that the field can be supplied as necessary. Shelving and bins must be provided in the service stockroom for the new compressors and parts. New crates for service replacement compressors may have to be designed, built and stocked. Service inventory records must be set up with minimum and maximum quantities.

If the compressor supercedes a former model, obsolescence and substitution procedures must be determined. Prices must be calculated for replacement compressors and parts. Parts lists must be compiled, printed, and mailed to distributors, dealers, and service outlets.

Serial number records must be

provided and warranty policies and procedures established and published to the field.

Installation and service instructions must be written, printed, and provided to go with each replacement compressor, and if the new compressor goes on a new refrigerator, complete instructions for the user, installer, and serviceman must be provided with each refrigerator. New service manuals or additional sheets for existing manuals must be written, printed, and distributed to the field by the time the shipments of the new compressor are first begun.

New sales literature will have to be designed and produced, artwork done, and thousands of pieces of literature printed and distributed. A new advertising program or revision of the existing program must include the new compressor. News releases to the trade papers and magazines must be made.

After the new compressors start going into the field, the field service representatives must watch them extra carefully and report back to the service manager favorable or unfavorable performance, and reactions of the users, distributors, dealers, or service outlets.

QUANTITY PRODUCTION IS NOT FLEXIBLE

So, putting out a new compressor is not quite the same as whipping up a batch of biscuits before breakfast. It requires a vast

amount of planning, preparation, and an unbelievable amount of changes, coordination of effort, and detail work throughout the entire organization.

If, instead of simply a new compressor, a new model unit or refrigerator, or a new line of equipment is brought out, the amount of work is multiplied several times.

Even changes in design or construction that may subsequently be made to this compressor must go through most of the steps outlined for the entire compressor although on a somewhat smaller scale. It is often difficult to appreciate what is involved in making what appears to be a very slight and simple change. Just changing the length of a screw must go through many of these routines in order to integrate the change into the system.

Does a lot of this sound like "red tape"? Undoubtedly every large organization does have some red tape, but in the American way of producing consumer products in large quantities at low prices, each little cog in the wheel must mesh with the other little cogs. Everyone plays his small but essential part.

Like the "mills of the gods that grind slowly but grind exceeding fine," our vast production machinery is cumbersome and it resists all changes, however small, but it produces enormous quantities at low prices that bring luxuries within the reach of all.

Liza had her bloodhounds . . .



but when it comes to tracking business there's nothing more effective than the

REFRIGERATION & AIR CONDITIONING DIRECTORY!

Here's an industry throbbing with life. Air conditioning shipments tripled in 1953. Manufacturers increased from 72 last year to more than 135 today. Four refrigeration manufacturers built tremendous new plants during the past 12 months.

And the 22-year-old DIRECTORY, with a guaranteed circulation of 15,000 is the only buyer's guide in this rich field!

To locate sources of supply, industry men use the DIRECTORY all year-round. Your listing is included free. Your advertisement will tell them what they want to know about your products. Back up your salesmen with an advertisement keyed to a booming industry. Mail the attached card today to reserve your space.

Refrigeration and Air Conditioning Directory

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521 Fifth Ave.
New York, N. Y.

Allen Schildhammer
134 S. LaSalle St.
Chicago 3, Ill.

Richard E. Cleary
Commercial Bank Bldg.
Berea, Ohio

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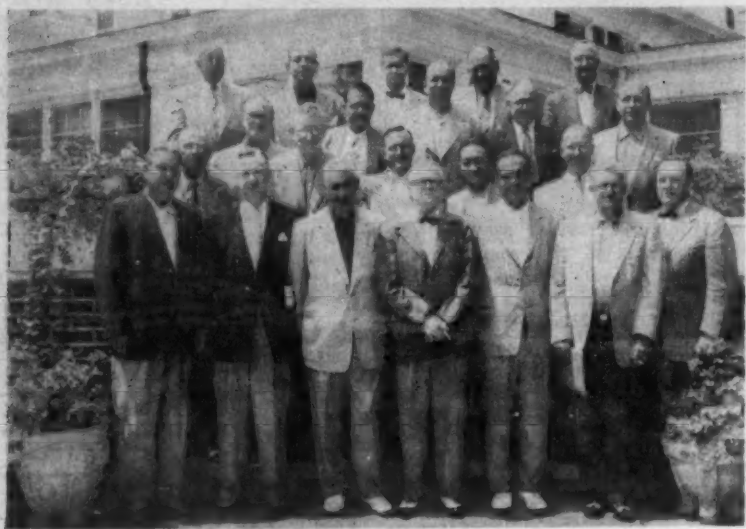
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BY (INDIVIDUAL)



DIRECTORS OF THE AIR-CONDITIONING & REFRIGERATION INSTITUTE, who among other things at their recent meeting changed the name of the All-Industry Show to the 9th Exposition of the Air-Conditioning and Refrigeration Industry, are pictured at the meeting at Absecon, N. J.

From row (l. to r.): L. C. McKesson, Ansul Chemical Co.; M. M. Lawler, Worthington Corp.; James Emmett, Jr., Jas. P. Marsh Corp.; George S. Jones, Jr., managing director of ARI; A. J. DeFino, Fedders-Quigan Corp.; L. W. Larsen, Tecumseh Products Co.; M. G. Munce, York Corp.

Second row: R. H. Israel, Virginia Smelting Co.; H. F. Hildreth, Westinghouse Electric Corp.; E. B. Dunphy, Acme Industries, Inc.; G. K. Iwashita, General Electric Co.; A. O. Vogel, Vilter Mfg. Co.

Third row: K. B. Thorndike, Detroit Controls Corp.; Walter A. Grant, Carrier Corp.; C. V. Gary, Henry Valve Co.; George E. Mills, show and public relations director of ARI; H. F. Spoehrer, Sporlan Valve Co.

Back row: Henry Strong, executive secretary, RISAC; John E. Dube, Alco Valve Co.; John H. Pratt, ARI legal counsel; F. G. Coggin, Detroit Controls Corp.; W. H. Aubrey, Frick Co.

IAEL Meeting--

(Concluded from Page 1, Col. 2) the latter on "Diversity Factor In Residential Loads."

"The Distributor's Viewpoint" is the title of a talk to be given Thursday morning by Peirce.

A feature of the Friday session will be a panel discussion of league activities. Among topics to be covered during this afternoon event will be licensing dealers for appliance installations, telephone directory listings, and home economist educational programs.

G. L. Logan of Los Angeles, IAEL governor, will discuss the first two subjects and V. W. Hartley, IAEL past president also of Los Angeles, the latter.

General sessions of the conference are open to anyone in the electrical industry. The Saturday morning business meeting, however, is open only to representatives of the league member organizations.

Other activities will include a sociability hour Wednesday evening, a sightseeing tour of Philadelphia Thursday afternoon, and a cocktail hour and annual banquet Thursday evening.

JUST ASK US!

Turn to "What's New" Page for useful information on new products.

WALL WIRE PRODUCTS COMPANY

A FOREMOST NAME IN THE MANUFACTURE OF DIVERSIFIED WIRE PRODUCTS OF SUPERIOR QUALITY

ORIGINATORS OF WIRE & TUBE CONDENSERS FOR STATIC AND FORCED CONVECTION, AND OF WIRE & TUBE FREEZER SHELVES

STAINLESS STEEL SHELVES, SHELVES WITH CHROME PLATE, ZINC PLATE, PRO SEAL AND PORCELIZED FINISH

WIRE GRILLES • GUARDS MATERIAL HANDLING BASKETS MISCELLANEOUS FORMED AND WELDED WIRE ASSEMBLIES ARC WELDED ASSEMBLIES

WALL WIRE PRODUCTS CO. PLYMOUTH, MICHIGAN

G-E Renames Commercial Products Dept. To Include Industrial Air Conditioning

BLOOMFIELD, N. J.—The General Electric Co.'s Commercial Products Dept. has been renamed the Commercial and Industrial Air Conditioning Dept., according to G. K. Iwashita, department general manager.

Explaining the name change, Iwashita said, "The need for a new name has become especially evident in the fast-paced business of the past few years as more and more industrial buildings have swung to air conditioning. Today, a substantial portion of our packaged air conditioner volume is in sales to industry. Because of this trend we feel that the name 'Commercial and Industrial Air Conditioning Dept.' is a more accurate one for the business we now conduct."

Iwashita said the renaming of the department would involve no other changes in its organization.

New Building Air Conditioned

ATLANTA—A new building for occupancy by the Great Atlantic & Pacific Tea Co. is being erected by the Church Street Corp. in East Point. The building, completely air conditioned, will be located at the corner of Church St. and Ward Ave.

A. O. Smith Expands--

(Concluded from Page 1, Col. 2) held the position of chief engineer—industrial and air conditioning research.

Flint is active in four heating associations: American Gas Association, Gas Appliance Manufacturers' Association, National Warm Air Heating & Air Conditioning Association, and American Society of Heating & Ventilating Engineers.

Last Call for Changes In 1955 Directory

Listings of manufacturers and wholesalers are now being compiled for the 1955 edition of the Refrigeration and Air Conditioning Directory.

Have you had changes in your organization since you replied to the questionnaire?

If your company has already been contacted, but changes have occurred since your reply—changes in personnel, new products, changes in address or trade names, please let us know.

If you have not yet received a questionnaire and are a manufacturer of consumer products, components, materials, or supplies for the air conditioning and/or refrigeration industry, write to Directory Editor, 450 W. Fort St., Detroit 26, Mich.

Houston Sales--

(Concluded from Page 1, Col. 3) habit-forming," the utility report said, "and the number of users of two, three, and even six units is steadily growing."

Electric range sales also made strong gains over last year (29%) as did electric water heaters (64%), clothes dryers (12%), and automatic clothes washers (5%).

Food freezer sales dropped 14%, refrigerators 17%, dishwashers 27%, conventional clothes washers 31%, and ironers 68%.

Comparative unit volumes for the various appliances were as follows:

Appliance	First 6 Months 1954	First 6 Months 1953
Range (Conventional) ..	1,354	1,398
Range (Built-in)	450	1
Refrigerator	13,993	16,722
Water Heater	221	134
Food Freezer	3,960	4,595
Washer (Automatic)	11,570	10,988
Washer (Conventional) ..	3,285	4,751
Clothes Dryer	1,316	1,171
Dishwasher	1,207	1,636
Ironer	74	226
Room Air Conditioners ..	27,713	20,237

Trane Greenville Office Moves

LA CROSSE, Wis.—The Trane Co., manufacturer of air conditioning, heating, ventilating, and heat transfer equipment, announces that its sales office in Greenville, S. C. has been moved to the Shives Bldg., 644 E. Stone Ave.

The telephone number, 5-3911, will remain the same. R. G. Beck is the Trane sales engineer.



T. S. FREMONT



J. P. HALPIN

Fremont Heads Appliance Sales for Admiral Corp.

CHICAGO—Admiral Corp. has expanded its appliance sales department and made five new appointments. W. C. Johnson, vice president-sales, announced recently.

T. Stanton Fremont, appliance manager for all Admiral's distributing branches, has been appointed to the newly created post of appliance sales manager for the company.

Joseph P. Halpin, contract division sales manager, has been appointed sales manager of Admiral's refrigerator division. He replaces Bert Schaefer, who has been ill for some time and is on an extended leave of absence.

Halpin will continue to direct the activities of the contract division which he established to sell appliances to apartment house owners and builders throughout the country.

In addition, three regional appliance specialists have been named to work closely with distributors and dealers in stimulating appliance sales. They are H. W. Scott, C. F. Weeks, and Gordon Bloom.

Fremont was general manager of Bendix Home Appliance Sales Corp. in Chicago and consumer products manager of the Westinghouse Electric Supply Co. before joining Admiral in February, 1954. Previously he was merchandise manager for Spiegel, Inc., and for 13 years was with Bloomingdale's in New York City, where he rose from stock boy to department manager.

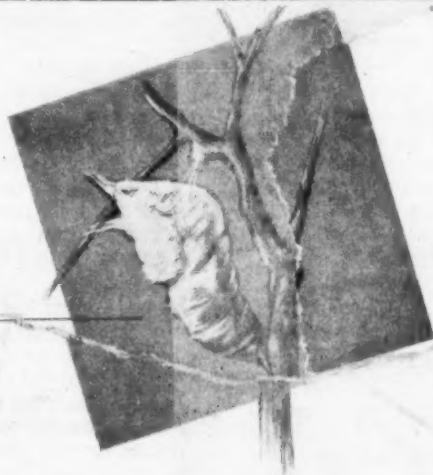
Halpin was sales manager of the apartment house and builders division of Crosley Distributing Corp. of New York for five years prior to joining Admiral in November, 1953.

Big Job Coming Up

CLEARWATER, Fla.—The City Commission has decided to air condition City Hall auditorium, the beach marina's sea-orama, and community hall as one project.

CRAFTSMANSHIP

A silk worm spins a foot of silk a minute when it makes its cocoon. In silk worm circles that's pretty good production.



TUBEMANSHIP

... but if you are making a tubular-shaped part for a refrigeration or air conditioning product, Wolverine can really show you impressive production. In one short, simple, unique operation a length of plain tube can be reduced, closed, necked, or otherwise fabricated into the precise part you need.

Costs? The Wolverine Spun End Process* slashes them. Proof? The Wolverine Spun End Book has it. Write for your copy today. WOLVERINE TUBE, Division of Calumet & Hecla, Inc., 1413 Central Avenue, Detroit 9, Michigan.



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DIVISION OF CALUMET & HECLA, INC.

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